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THE RELATION OF THE PUBLIC HIGH SCHOOL TO THE SYSTEM OF WHICH IT IS A PART

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In this article the claim is not made that the activities of our local high school are any more original in their conception than those of hundreds of other similar institutions. The instances of achievement are but typical of what has doubtless been done elsewhere. However, they give concrete illustration to some of the definite ways in which the high school may function in its relation to the work which the school system is trying to accomplish. Each locality, with its different traditions and special local environment, may find different and better ways of like achievement. But the claim that is made is that educators should be very conscious of these new relationships.

We have no junior high school, nor intermediate schools, nor departmentalized grammar grades. But we are trying by other means to make a natural transition from Grade VIII to the high school. For a number of terms the superintendent and the principal of the high school have held meetings in the various grade schools for the purpose of discussing the high-school curricula. Eighth-grade pupils and their parents have

been invited to these gatherings by the grade-school principals. The series has occupied several successive evenings, one meeting being held in each natural geographical section of the city. In some instances two or more schools have combined in a meeting at one convenient center. In a very informal way the superintendent has explained to the parents and their children the value of a high-school education, from several definite standpoints, and the necessity for getting a good start in high-school work in the new surroundings in which the students will be placed. In his talk he usually cites concrete illustrations of the successes of certain high-school students in after-life and of the failures of other pupils who have made a false start in high school. He always points out some of the misconceptions that parents have regarding the high school and some of the mistakes made in the selection of courses by entering pupils. For instance, girls have often entered the commercial curriculum because the "other girls" in their set have chosen it, and later have found that they wish to go to normal school or college and must change to another curriculum. Boys too often follow the selection of a popular playmate and choose the mechanic-arts curriculum rather than the classical, or vice versa. Others decide to go to business college or take some other vocational course, and by so doing often make a costly mistake. No one has told them that we have an arrangement by which a general course, a household-arts course, or a mechanic-arts course can be taken for a year, and that the decision for a college-preparatory or vocational course can then be made without entailing any loss of time or school credits. Others think that because they must go to work and earn money their education must cease. They do not realize that part-time courses in the high school will enable them to work for pay and continue their studies.

By the discussion of such topics as these the superintendent prepares the way for a talk by the principal of the high school

on the specific content of the various curricula. In this talk the principal shows what considerations should guide parents and pupils in their selection of a particular high-school curriculum. He points out the proper course for pupils who are seeking a sound, general education without yet having any special idea as to a vocation; for those who think that they may enter colleges or scientific schools; for those who wish to go to a normal school; for those who know that they are destined for a business career or for a trade; for those who wish to specialize in household arts, and for those who wish part-time courses. Cautions are given to prevent pupils who are notably weak in English from undertaking the usual four-year course in Latin; but pupils who have excelled in the grades are urged to consider seriously taking up college-preparatory work. An attempt is made to keep pupils from making a decision in favor of special vocational work before such decision is necessary; but such decisions are advised in the case of those who have planned to leave school at once without any vocational or prevocational training. The discussions from the floor and in the ensuing private conversations are frequently concerned with preparation for a particular college or normal school. Often a parent believes that his child has a particular liking for some line of work (such as mechanics, art, or music) and seeks advice in the matter.

After these meetings, which have been held about a month before the end of the term, the grade-school principals and eighth-grade teachers are asked to see that a "selection card" is signed by the parent of each pupil likely to enter high school. This card gives the choice of a high-school curriculum (classical, or scientific, or commercial, etc.) and the choice of any particular optional studies allowed in the curriculum selected. On the information secured from these cards is based the arrangement of first-term classes. Our experience has been that there are now fewer requests for change of course after

entrance, and we believe that school enrolment has been sustained. In a recent term, instead of holding the series of meetings outlined, high-school teachers were sent to discuss these matters before the eighth-grade classes. The results did not appear to be as beneficial as those secured by the other method.

We are attempting to adjust the entering pupil more quickly and thoroughly to his new high-school environment. Upon entering high school, the pupil probably has four subject teachers, where hitherto he has had one. Moreover, his grade teacher has probably been friend and adviser as well as teacher, having observed him at study and from the angles of the several subjects in which he has been her pupil. Now he sees his section-room teacher but a short time each day, and instead of remaining in one room he makes frequent shifts to the various parts of the school building. Instead of seeing many friends continuously, he comes in contact with a few occasionally. Many pupils in this situation are bewildered intellectually and lost socially. No wonder that the interest in school life often lags and that classroom results are unsatisfactory. To meet this situation the section rooms of entering pupils consist of small groups, usually not more than thirty pupils in a group.

The business of the "section teacher" is not merely to see to attendance and issue monthly reports, but to act as a "committee-on-the-whole" in all matters pertaining to the welfare and school progress of these thirty pupils—to fulfil the functions of the former eighth-grade teacher. In so far as is possible this teacher retains charge of this group of pupils through the ensuing terms. Owing to the wide area from which high-school students come and the burdensome duties of the teachers, homes have not been visited so extensively as we wish. But we plan to give to teachers in charge of entering pupils one less daily period of teaching so as to enable

them to have time to visit homes and consult with the former as well as the present teachers of their pupils. We have the eighth-grade teachers send to us a confidential record card for each of the entering pupils. This card gives the name and address of the pupil, the parent's name and place of business, with the kind of business specified. It gives the pupil's final grades in English and arithmetic. Former teachers are asked to state any special aptitudes of the pupil (such as music, art, etc.), and to give any other information concerning the pupil or home conditions that will prove helpful to high-school teachers. This card bears no relation to the selection of studies, but is kept in the files of the high-school teacher to whom the pupil is assigned.

Whether a school system be organized on the "six-and-six plan" or on the "eight-and-four plan," better continuity of the educational process for each pupil is highly desirable. The high-school principal must move away from the notion that he is administering a separate academy for the benefit of those pupils who survive the grades or for the members of the upper high-school classes who "can do" high-school work. He must give to each pupil the fundamental as well as the special education best suited to his needs. Moreover, he must interest himself in the supplementary education and in the vocational training of those of high-school age who are not reaching the high school or are leaving it prematurely. In the opinion of the writer, nothing can join the principals of high and grammar schools more closely in a common comprehension of their joint responsibility than their efforts to aid their superintendent in the solution of these problems.

We are trying to make our new pupils feel "at home." A social "get-together" affair of all first-year girls was held this term, and a similar affair is planned for the boys. The gymnasium with the informal character of its surroundings, the stage and the open floor space, makes possible a program

that is attractive, consisting of group games, music, special "stunts" by pupils on the stage, words of welcome from teachers, and a little something to eat. The arrangements for these gatherings is simplified by the fact that these same groups meet in gymnasium classes. This gives ready opportunity for committees to meet and plan for such an affair. The directors in the boys' gymnasium have emphasized team-contests among the various room groups of boys, especially in basket-ball. The interest taken in this form of intramural athletics, in which all can participate, has added to the attractiveness of school life for these boys at the outset of their high-school career, without introducing some of the deleterious influences which too often accompany interscholastic games.

To say that much in the way of community service is expected of the public high school is but a truism in these days when every high school in the land has been a veritable dynamic center of war work. Noteworthy results have been attained in Liberty Loan campaigns, work for the Red Cross, the Y. M. C. A., the Girls' Patriotic League, the recent United War Work Campaign, and in numerous other enterprises. If the community had not already in the days before the war looked to the high school—the apex of the local school system—for great energy and strong support in community efforts, it does so now. This public attitude is just. High-school pupils have received not less than eight years of free education, and the public has a right to expect a return. Moreover, the frank acceptance of the implied responsibility by secondary-school teachers and their classes will constitute a great educational gain. To become useful citizens, pupils must feel that they are actually living and serving in the present, not merely preparing to live in the future. So far as our local high school is concerned, the war seems to have brought nearer a result toward which the school authorities have been working.

The numerous civic responsibilities which students may assume in even normal times may frequently correlate closely with the usual secondary curriculum. For example, shortly before the war a student campaign raised money for a great city organ in the high-school auditorium. This campaign was managed entirely by the officers of our student council in co-operation with the members of the local Rotary Club. The sum of \$4,400 was raised in one week by the sale of tags and the securing of larger subscriptions by the students. Not long ago the high-school Civic Club studied the city ordinances and prepared a pamphlet for popular distribution. This was issued by the Chamber of Commerce in co-operation with the Woman's Club. It contains the ordinances which concern most intimately the daily conduct of the citizens. They are grouped under the headings: health, the street department, the police department, and the fire department. The need for the booklet was discovered by the Woman's Club when promoting the work of the Junior Civic League in the elementary schools. The members of the League, on being instructed to observe the city ordinances or laws, raised the query, "What are the laws of the city?" The secretary of the Chamber of Commerce appealed to the high-school Civic Club for help in compiling the laws in a simplified form. This was done by a teacher and his pupils after interviews with the secretaries of the various departments. The material was submitted to the city attorney for his criticism before being printed. At his suggestion various legal maxims were interspersed among the simpler statements of the ordinances.

Commercial classes frequently do clerical work of a civic character, such as copying lists for the board of education, making card indexes for the draft boards, and sending out form letters for the Red Cross and other charities. Students have charge of the stockroom from which our schoolbooks are issued. They have assisted in the bookkeeping operations of the school lunchroom and the school bank.

Many teachers have felt that these civic undertakings—particularly war enterprises—are a departure from the “regular” work of the school. But has not this feeling been due to the amount of time and conscious effort always necessary in planning a new matter? We must acknowledge the beneficial results that have come from the recent enlivening of school work. It has been given motive by being related to results that are immediately worth while. When such correlation gets beyond its initial stages, there may be recognized methods of leading pupils into common enterprises and individual activities by which the community is served.

It has been a tradition with us to maintain the highest possible standard of excellence on those occasions when the public comes into contact with our work. In the commencement exercises, which occur twice yearly, we attempt always to give an impression of a high order of excellence. The student speakers are few and our best. The outside orator is chosen because his utterances will elevate and sustain the highest educational ideals. On this occasion the president of the board of education and the superintendent of schools always address the public. This carries the impression that the school system here comes into vital contact with the people. The music—choral and instrumental—is so good that this feature alone has acquired for the school and city an enviable reputation.

The musical aspect of our work is reinforced by an annual concert, one of the best artistic events of the year. Special attention is given to the music of the daily school assembly exercises. In them the best in school music is our aim. Parents and visitors attend when there are special programs. This is where citizens most frequently see the school in action, so to speak.

Our motive in organizing an alumni association has been not merely to cement friendships and associations formed in

school, but to make use of the loyalty of alumni in creating a sustaining public sentiment in behalf of high ideals in education in the city. An alumni association should be much more than a "get-together" club. It should be the means of creating a large and influential group of citizens who favor a liberal policy toward the schools.

The public high school is peculiarly representative of the whole school system, in the sense that the schools are judged very largely by what its pupils do and by what its institutional activities are. The high school ought to be in method as well as in form an integral part of the system which comprehends the administration of the "grades." Because the high school is a well-organized entity composed of the educated youth of a community, it has a civic responsibility that should be well recognized.

DIRECTED STUDY

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Much has been written upon the subject of "supervised study." Numerous and various attempts have been made to introduce it into our schools. Usually this has been done by a combination of recitation and study in longer class periods.

In these attempts serious difficulties and faults have appeared. Longer periods require a larger teaching force, and only the large city schools can or will undertake it. Supervised study requires a radical change of program and methods of work, and superintendents hesitate. The uncertainty and the added burden are too great with the yearly shifting of teachers.

Daily supervised study with every lesson gets no farther with most teachers than seeing that the class studies or giving continual assistance to the poorer pupils. The habit of daily study under the eye and command of the teacher, whose task is to be learned, lessens for the pupil responsibility, initiative, independence of effort. As Professor Judd well says, "If the student becomes dependent on social help in the solution of all his problems, the substitution of social training for independent learning becomes a serious drawback".

Assistance fastens the attention of teacher and pupil upon the end—an answer—and not upon the best way to the end—upon how to prevent a future like difficulty. It is chiefly in the interest and to the advantage of the dull, the slow members of the class, and the tendency with these is to confine their study to the time of supervision, when they need to do much

¹ *Psychology of High-School Subjects*, p. 124.

more. The scheme looks thus to uniformity, the passing of all. Those who have tried it count that as its greatest value in their praise of it.

Supervised study does not help the best students, those who get their lessons as it is. It may even bring loss to some through their being satisfied with the use of the supervised period. It does not remedy the neglect of the best, one of the greatest losses of our present school methods.

IS A CHANGE NEEDED?

Without raising further difficulties and objections, one wonders if "supervised study" is as necessary as some have thought, or is it another passing "fad" in education?

There are urgent reasons for some change in classroom procedure. The pupil recites too much in the school hours and studies too little, and he recites too much for the studying that he does, and, therefore, recites poorly.

Possibly the nature of the present studies of the high school has made study more difficult than in the past. English, history, modern language, with aims and methods varying so widely with changing teachers, have done much to make the pupil vague, uncertain, disinclined toward any real study. A lesson that requires more than the suggestions of assignment and a hasty reading is too difficult now. It was not so when Latin and mathematics were the backbone of the course. Changed conditions require a change in methods.

The teacher gives his thought and energy to the recitation, to the results of his pupil's effort, rather than to the means to the result. The teacher takes too great a part in the recitation. It must go somehow without his help or with it, and he helps¹.

Something must be done also if book studies are to hold their place in school work. The double periods given to

¹ SUPERINTENDENT ZIMMER'S *Teaching Boys and Girls How to Study*. Madison, Wis.: Parker Pub. Co.

science and vocational subjects, and the close supervision of the work in the classroom give them an advantage in the greater attention they receive, cut short the hours of study, and make the student less inclined and less able to study a book by himself.

Still further, teachers find that suggestions at the assignment for the study of a lesson do not go far with the beginner and the slow pupil. Such pupils cannot connect the suggestion with an unfamiliar lesson. Such desultory directions also develop no plan or regimen of study. The pupil studies for years with little thought as to how he studies or how he might study.

All these conditions and others that might be added make the present call for attention to study an imperative one.

WHAT IS NEEDED?

Some way of leading the pupil to grapple with a lesson by himself with a mastery of it, is necessary. The goal in study is habit, method, success without a teacher. That is worth far more to the learner than the increase in knowledge through daily dependence upon the eye and the suggestion of the teacher. Any guidance in study that does not lead to walking alone is a mistake.

A need of every pupil is a technique for the study of the different subjects: how to attack the lesson, what to do next, how to keep at it, how he may know when he is done—when he has his lesson. As it is, students are left to blunder into their methods. Assistance and assistance do little to give methods of study in a subject.

An essential condition of better study is some way of the teacher's finding and following the pupil in the act of studying—getting at his mental processes in action. Improvement in study cannot come by any imposed plan, but, as in writing or in any mental process, it must be by trial and by correction of

errors. To accomplish this there must be a natural occasion of approach to the learner and a definite plan and purpose by the teacher.

Any plan for better study must include provision for assistance of the pupil when it is needed and when best, but the office of the teacher is not merely to help the pupil over the difficulty. Other members of the class can do that and often better. The teacher's concern is with the mental processes of the pupil needing help, with what are his needs for helping himself next time.

Any effort to secure better study must give opportunity and stimulation to the best to do their best. One of the loudest calls for some change comes from the universal neglect of the best third of the class in the teacher's effort to save the poorest third. His methods and he are judged almost solely by the minimum of failures rather than by the maximum of real students that he has made. A student may be good by reason of native ability not half exercised, or by reason of great effort half wasted by poor methods of study. Good students need help, direction, and opportunity to do their best as much as do the poorest. Most teachers under present recitation methods have but a faint idea of the range of individual differences in every class. Better study will never come until the best do their best.

Any movement for improvement of study and recitation should take teacher, class, and school program as they are, and, fixing some goal, bring them all step by step to its attainment. School conditions are changed by revolution only with great loss. Evolution is the process of growth. It is a long way from knowing a subject to knowing how boys' and girls' minds get up a subject. No change of program will give the latter knowledge. The teacher must learn it and teach it step by step.

IS THERE A WAY TO MEET ANY ONE OR ALL
OF THESE NEEDS?

Yes, by the use of the regular class period sometimes for recitation and sometimes for study, the class studying an assigned advance lesson and the teacher in personal conference studying how the pupil studies.

For example, once in two weeks or oftener, and on no regular day, the teacher after assigning the advance lesson for the next day says to the class, "You may study this lesson this period and I will confer with some of you about your ways of studying a lesson."

After waiting a few moments to note which pupils show the "agony of starting," the teacher sits by some pupil, or calls one forward to the desk, and in an undertone says, "Mary, have you today's lesson?" or, "John, did you find any difficulty," or, "What was new to you in the lesson?" or, "What use of it occurred to you?" or a searching question may be put to a bright student. After some such natural introduction, these questions follow: "What did you do first when you studied the lesson?" "What next?" "What next?" "Is that the way you usually study?" "How long did you study?" "Where did you study?" "Do you keep at your lessons when you begin?" "When do you think that you have your lesson?" Continue thus until the pupil's mental processes are before you. Let the teacher make one or two helpful suggestions, and send him back to his lesson. If he needs help, let the teacher ask one of the class to assist him. The business of the teacher now is not that of a nurse, but that of the doctor making his diagnosis. Then another pupil may be called, and another, until the period is more than half passed. After that the questions for each one may be based on the study of the new lesson, finding out how much each has done to get an idea of his pace. Just at the close, the teacher may pass to half a dozen others and ask how much each has

done. Then he may make one or two practical suggestions to the class about how to study, and may add, "Tomorrow you will recite today's lesson and the one you have just studied. You have had an additional period for study and we can have a much better recitation than usual." If that is insisted on the next day, a new standard will be set for the recitation.

At the next study period, others of the class may be interviewed with one or two of those taken the first day.

After the teacher has thus gone around the class, he will know more about the work and possibilities of each one than in a whole year of recitations. If he has a notebook with a page for each pupil and jots down notes as he goes on, each pupil will become a most interesting problem, and its working out the joy and pride of the teacher.

After this acquaintance with the class, which should come first, one or more study periods may be given to some specific end. Inquiry and suggestion may center on "getting started on a lesson," "going over it the first time," "selecting the main points," "speed and intensity in work," "fixing a lesson by recall," "elaboration or thinking the lesson over for recitation," "uses of the lesson," "generalizations," "mental economies," "problems and question," etc.

Each of these points should first be the subject of a personal questionnaire of a number of the class, to know what they are actually doing and to give a basis for suggestions and direction. If after the attention to some method of study the following recitations give emphasis to it, a lasting impression will be made.

Exercises in speed are especially desirable for increasing power in study. Dullness is often only slowness, failure in effort of will, in getting the close association of ideas that give the flash of thought. Even high-school pupils may read too slowly to know what they read.

Work upon recall in preparation for recitation, and aloud at home if possible, will bring large results.

A STUDY CARD

At the right stage a printed study card reading somewhat as follows may be helpful:

1. Go through the lesson carefully to understand it.
2. Go over it rapidly for its main points and make notes of them, or memorize them.
3. Try next to recite to yourself on each main point either by thinking it through or reciting aloud at home.
4. Ask yourself what is new in the lesson.
5. Think of some uses of the lesson.
6. Find some question that you want answered.

Sometimes at the close of the study-hour questions on the lesson may be called for. Those approved may be taken down by the class to prepare answers for at the next recitation. Sometimes at the beginning of the conference hour the teacher, in the assignment, may raise an important question on the advance work, the working-out of which he may follow, leaving its discussion for the next day.

But, above all things, the study-period must have the purpose and air of study. No record of what pupils do for any purpose of grading or ranking is to be made. The work must be totally different from that of the recitation, in order that the pupil may be put off his guard and may reveal himself.

WHAT ADVANTAGE HAS SOME SUCH PLAN OF DIRECTED STUDY?

For the pupil.—He meets his teacher on a new, more personal and intimate plane. There is opportunity for suggestion, vision, promotion, for asking questions, for stating his difficulties and his ambitions.

His habits of study are improved. His earnest, steady attention or his intermittent effort and continual easy inter-

ruptions appear and may receive commendation or suggestion in the personal conference if his teacher has noted them. A study-period is worth while for this purpose alone.

Study is emphasized and dignified for him. His "bluffing" is of no use. His teacher knows. He is not carried with the weak ones day by day, but in the end is doing his work himself and doing it better. The best have the privilege of mastery of the lesson without help. The call to help others gives the pupil a new point of view both of the subject and of his relation to the school, and the gain in power is better than merely having a longer lesson.

The pupil helped by his classmates has a new spur given him. If they can do it, why can't he? Assistance by his teacher seems different. The student really needing help has a new door of hope in the new opportunity of access to the teacher, and to the help of his mates. The plan may gird, therefore, for more earnest effort both the best and the poorest of the class.

For the teacher.—The plan requires thought and effort upon the problem of study—the basic problem in the learning process. It has been greatly neglected. It gives opportunity for getting at the mental processes of the pupil which may be known far better in the act of studying than in his reciting. There he is on his guard. It is to his interest to conceal the way by which he came, as only results count in recitation.

The plan puts the teacher in a new light, in a new relation to his pupils. He becomes really to them their helper, adviser, confidant. It broadens greatly the field of personal contact.

It gives the teacher his real function, as director and guide of the pupils' effort rather than a marker of results; as a leader of helpers rather than a lone helper running to this one and to that one.

It lifts him out of the routine and rut of the same subject and of lesson-hearing. Many teachers after five years become

mechanical. They are in every school. What they teach and their methods are fixed. They need a new problem, a new field for increase in skill, for growth in power. This plan should wake up the plodding teacher, for it is vital.

It adds nothing to the teacher's hours of work, but varies his work, makes it all more intelligent and effective, more interesting in its revelation of mental varieties and habits, of individual differences. It should save much of his after-school work with pupils when both he and they are tired and hurried, a service often of doubtful value.

The plan is flexible and practical. The teacher may begin with one class and, as technique is gained, may extend the plan to his other classes. The study-period, being unannounced, may come once a week or once a month as the teacher can use it to advantage. A new system has not to be embarked upon all at once. It is a practical way, for every teacher, of passing from all recitation work to directing the study of his pupils.

For the School.—The principal may introduce the plan with one teacher and one class. A success will react upon all the teachers, a failure will not be serious.

Any teacher may ask to try it and may do it without disturbing the order of classes or any other teacher's work, or making any noise about it. The less said about it, the better.

The plan does not affect the present organization or program of any school, nor launch it upon an uncertain experiment trying or impossible for some teachers and provoking criticism in anticipation. No time nor no amount of work is lost in any study. If necessary, there may be a gain by longer lessons with the extra study-period. This, however, is not advisable. Better quality of work is wiser than increase in quantity.

The plan adds nothing to the expense of the school or of the teachers, but only makes present resources more valuable.

It does not start with decrying or disparaging the recitation, expression by the pupil, but makes it more effective and richer by guiding the preparation for it.

It brings into classroom and school a new atmosphere, a new view, It interests the best and what interests them becomes of interest to all.

As students are the helpers of others in the classroom or out of it at the suggestion of the teacher, the school becomes a co-operative, a democratic body, each member doing his part for the common welfare of all in the task of learning. All are students and all are teachers according to their ability to serve. It is the new and coming school reached by a natural and practical process of transition—the seminar of the graduate school adapted to the lower school.

WHAT PREPARATION DO TEACHERS NEED FOR DIRECTING STUDY?

Teachers need some thought and study upon their own ways of mastering a lesson. They have spent years upon the subject that they are to teach, but have never given an hour's hard thought to the mental process of acquiring the subject. They have learned to study as they have learned to talk—by picking up their ways, good, bad, or indifferent. The teacher must examine his own processes of acquisition if he is to discern and interpret those of his pupils.

The teacher needs to carry along with his conference a study of his pupils' minds. The attitude of a learner himself well becomes him there. The opportunity for this study is almost boundless. There is no one way he will find for all minds. As he learns and studies his pupils' various ways of getting a lesson, their rate of progress, what stimulates them and what hinders, he will gain the ability to tell pupils how to study, the true professional equipment of the teacher.

An acquaintance with the elements of psychology for terms, and a differentiation of the mental processes, will help the

teacher to find his way¹. This study of psychology, or a review of it, should be taken along with the conferences to give reality and concreteness. It is an applied, a used, psychology that the schoolroom needs, not simply a theory of mind activity that the teacher forgets and gets along without. The teacher who has never seen a psychology can, by observation and thought upon his own and his pupils' mind activities, gain a psychology more practical than that which the college graduate usually has.

Especially should the teacher have some clear idea of the methods of study suited to his subject. He has taken courses on how it should be taught, but what his pupils need most is to be told how to study it and how they may adapt his method to their individual minds and their peculiar conditions.

A clear, definite aim for each lesson stated as a proposition helps the teacher greatly in directing the study of it. How otherwise can he know how and where to direct its study? For example, "I want my class to find and know that fractions when added must have a common denominator because only like things can be added," or "that the passive voice is that form of the verb that shows that its subject receives its action." A proposition for a lesson will do more for both teaching and studying it than half the usual study of methods.

Studying is finding a proposition. Directed study is putting the pupil on the track to find it himself. That is the proposition of this discussion.

The writer hopes that this plan may give to some teacher who will try it, a way out to better study by his pupils and to a richer service for them.

¹ "How to Use Your Mind." HARRY D. KITSON. Philadelphia: J. B. Lippincott Co. \$1.00.

"How to Study Effectively." G. M. WHIPPLE. Bloomington, Ill.: Pub. School Pub. Co. 50 cents.

A SCALE FOR MEASURING PUPILS' ABILITY TO DEMONSTRATE GEOMETRICAL THEOREMS

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It is desirable that a scale shall be developed for the measurement of each of those abilities upon which the mastery of geometry is dependent. Among these is the ability to demonstrate a theorem when the figure is drawn, and the hypothesis and conclusion are given. The chief difficulty in developing a scale for measuring this ability is the time element. The writing of a complete demonstration requires too much of the pupil's time, and the scoring of such a scale is time consuming. On a former occasion¹, the writer used a geometry test in which the drawing for a theorem was given and the hypothesis and conclusion were stated. The pupil was then asked to make any additional drawings necessary to prove the theorem. Although the exercises of this test were poorly selected, the results were so favorable that it seemed possible, by the use of this method, to construct a satisfactory scale. This scale would have the advantages of requiring no writing on the part of the pupil and of being easily scored. The following is a report of an attempt to construct such a scale.

From various sources eleven exercises, apparently suited to the purpose of the scale, were selected. The time available for giving the test made it impossible for each pupil to solve all the exercises. In order to get a random selection of pupils solving each exercise, the following plan was used: Each exercise was printed on a separate sheet of paper in the manner

¹ J. H. MINNICK. *An Investigation of Certain Abilities Fundamental to the Study of Geometry.*

shown on pages 107-109. The exercises were then assembled in groups of three each in such a way that every possible combination of the exercises was taken, any one combination occurring as often as any other.

The following directions were sent to each teacher who gave the tests:

1. See that each pupil is supplied with a pencil and ruler.
2. *Read to the pupils:* I am going to give you some geometry exercises. In order that you may all have the same chance, I want you to start at the same time. Do not open the set of questions which you are about to receive until I give the signal to begin work by tapping on the desk.
3. Distribute the questions.
4. Have pupils fill out blanks on the cover sheets of their questions.
5. *Read to the pupils:* At the top of each sheet which you have received there is a geometrical figure. Below this figure there is a statement of what is given and what is to be done. When the signal to begin work is given, fold back the cover sheet, read carefully what is given and what is to be proved in one of the exercises, and then make any additional drawings that are necessary to prove the exercise. Thus, if, in the triangle ABC $AC = BC$ [place drawing on the board] and if we are to prove that $\angle A = \angle B$, we may draw CD to the mid-point of AB . When you have completed this exercise proceed in a similar way to do the other exercises. Do not write any explanation on your papers and do not prove the exercises. All I want to know is whether you can make the correct drawings. You may do the exercises in any order you prefer. When you have completed the exercises to the best of your ability, hand me your papers.
6. Give the pupils a chance to ask questions concerning the instructions, but do not reveal the contents of the questions by your answers.
7. Note the time and then give the signal, thus: "Ready," and tap on the desk with your pencil.
8. Do not permit talking in the class until all papers have been returned to you.
9. In the case of any irregularity on the part of any pupil during the test, make a note on the cover sheet of his questions indicating the exact nature of the irregularity.
10. As the pupils hand you their papers, note the amount of time required by each, and record it on the upper right-hand corner of the cover sheet of his or her paper.

The tests were given in thirty high schools distributed throughout the country and ranging in size from a few hundred pupils to several thousand. Each of the eleven exercises was solved by at least seven hundred pupils. These pupils had completed either the first two books of plane geometry or all of plane geometry.

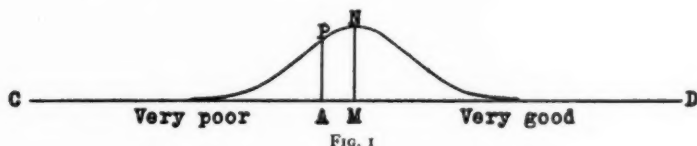
TABLE I
PERCENTAGE OF PUPILS SOLVING EACH EXERCISE CORRECTLY

Number of Pupils	EXERCISES										
	1	2	3	4	5	6	7	8	9	10	11
50.....	42	76	20	42	68	28	68	14	40	16	46
100.....	37	70	28	42	62	20	60	12	41	24	47
150.....	34	71	33	38	63	22	60	13	41	40	36
200.....	34	72	37	38	64	26	64	15	44	46	36
250.....	33	75	42	37	64	28	60	12	45	43	36
300.....	35	76	45	37	66	30	61	14	45	41	37
350.....	38	77	49	37	67	32	64	15	45	36	38
400.....	38	77	46	38	68	33	64	14	43	32	36
450.....	41	77	46	36	66	35	62	14	44	28	37
500.....	41	79	48	35	66	34	60	14	42	25	36
550.....	41	81	49	30	66	32	59	14	42	23	36
600.....	42	81	49	29	66	32	58	14	41	22	35
650.....	42	82	49	28	67	31	58	13	40	19	34
700.....	42	82	49	28	68	31	57	13	39	20	34

In order to secure uniformity of marking, all papers were marked by the author. Any drawing which made a proof possible was usually counted as a correct solution. If, however, in addition to the correct lines, unnecessary lines were drawn, the solution was marked as incorrect. Also, if the proof resulting from a drawing seemed to be too difficult for high-school pupils, those pupils making the drawing were asked to complete the proof. If the majority could not do so, the drawing was not accepted as a correct solution. A careful

record of all acceptable drawings has been kept and will be included in the "Directions for Scoring Papers".

Table I gives the percentage of pupils solving each exercise correctly. The table is arranged in a cumulative way, each new line including the data for fifty additional pupils. Thus of the first fifty pupils solving Exercise 1, 42 per cent got it correct; of the first hundred solving Exercise 1, 37 per cent got it correct, etc. The table shows that the number of pupils tested has not been sufficient to eliminate completely individual variation. However, the percentages are fairly constant, and it is not probable that the addition of data from more pupils would vary the order of difficulty or seriously change the weighting of the exercises.



In weighting the exercises we have assumed that the distribution of pupils according to the ability in question will result in the normal frequency-curve as shown in Fig. 1. The direction from left to right on CD will be considered positive. The line MN represents the median. If AP is drawn so that $AMNP$ is one-fourth the entire surface under the curve, then AM is known as the *P. E.* (possible error).

Reference to Table I shows that Exercise 2 is the easiest of the eleven exercises used. The score for this exercise is 82. It is, therefore, $82-50$, or 32 per cent too easy for the median pupil. Converting this difference into *P. E.*² values, we find that Exercise 2 falls at -1.357 *P. E.*; that is, 1.357 *P. E.* to the

¹ Information concerning the prices of tests and directions for giving and scoring the tests may be had by addressing J. H. Minnick, College Hall, University of Pennsylvania, Philadelphia, Pennsylvania.

² Table XIII of Trabue's *Completion Test Language Scale*.

left of the median. Since our zero-point must be arbitrary, we may select it so as to give convenient numbers for values of the various exercises. Hence we have selected -2.357 P. E. as our zero-point. This makes Exercise 2 fall at 1 P. E. above the zero-point.

Table II indicates the method of determining the value of each exercise. Thus the first line indicates that 42 per cent of the pupils solved Exercise 1 correctly, that the exercise is 8

TABLE II
VALUES ASSIGNED TO EACH EXERCISE

Exercise	Per Cent Correct	Difference between 50 Per Cent and Score	P. E. Value	Distance in P. E. above Zero-Point	Value
1.....	42.0	+ 8.0	+0.299	2.656	27
2.....	82.0	-32.0	-1.357	1.000	10
3.....	49.3	+ 0.7	+0.026	2.383	24
4.....	27.9	+22.1	+0.869	3.226	32
5.....	67.7	-17.7	-0.681	1.676	17
6.....	31.3	+18.7	+0.723	3.080	31
7.....	56.7	- 6.7	-0.250	2.107	21
8.....	13.3	+36.7	+1.649	4.006	40
9.....	39.3	+10.7	+0.403	2.760	28
10.....	20.0	+30.0	+1.248	3.605	36
11.....	34.0	+16.0	+0.612	2.969	30

per cent too difficult for the median pupil and is, therefore, 0.299 P. E. above the median or 2.656 P. E. above our arbitrary zero-point, and that the value assigned to Exercise 1 is 27. In order to avoid the decimal point in the values assigned, 0.1 P. E. has been taken as the unit. The values are then obtained by moving the decimal point one place to the right in the next to the last column of the table.

Fig. 2 is the linear projection of the eleven exercises. From these exercises it was necessary to select those which should constitute the scale. When the tests were given, a

record was kept of the time required by each pupil to do the three exercises assigned to him. This time varied from 5 to 30 minutes. The average time spent by a pupil was about 18 minutes. It, therefore, seemed that five exercises were sufficient for the 15 or 20 minutes¹ which the pupils will be given to work on the final scale. An examination of Fig. 2 shows that

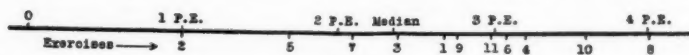


FIG. 2

Exercises 2, 5, 3, and 6 are distributed along the scale at almost equal intervals. The interval between 6 and 10 is somewhat smaller, and that between 6 and 8 somewhat larger than the intervals by which 2, 5, 3, and 6 are separated. Exercise 10 occurs as a theorem in some texts, and the results from the schools in which the tests were given were clearly affected by this fact. Hence Exercise 8 was selected as the fifth exercise of our scale.

TABLE III
ORDER OF DIFFICULTY FOR THE EIGHT LARGEST SCHOOLS

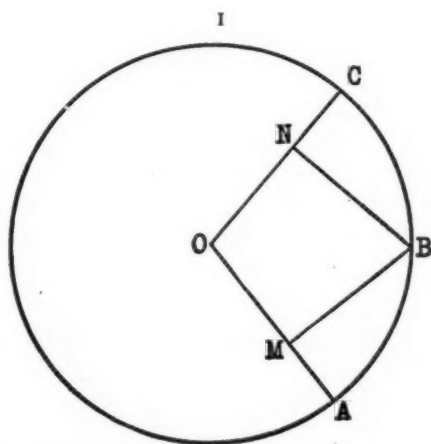
Schools	ORDER				
	1	2	3	4	5
A.....	2	5	3	6	8
B.....	2	3	5	6	8
C.....	2	5	3	6	8
D.....	2	5	6	3	8
E.....	2	5	3	6	8
F.....	5	2	3	6	8
G.....	2	3	5	6	8
H.....	2	5	3	6	8

The selection of these five exercises is also justified by the fact that two fall above, two below, and one almost at the

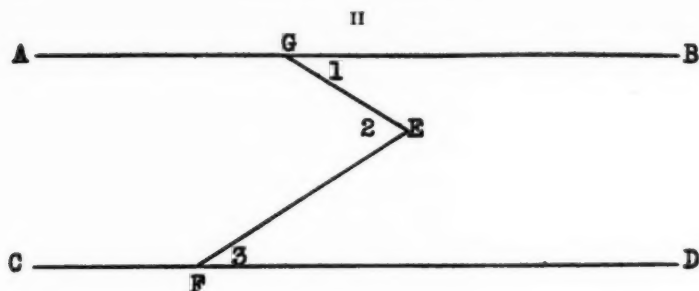
¹ This time is to be determined experimentally during the year 1919-20.

median. Also, if we examine Table I, we find that these exercises have been given to enough pupils to give almost constant results. The order of difficulty of these five exercises for students completing the first two books of geometry and for pupils completing all of plane geometry has been carefully examined and has been found to be identical in the two cases. Table III shows the order of difficulty for the eight largest schools. Thus for School A the array of exercises from the easiest to the most difficult is 2, 5, 3, 6, 8. Four of the eight schools have the same order of difficulty. In each of the other schools there is one and only one reversal of the order. In no case is an exercise removed more than one place from the order given by all of the schools taken together.

Exercises 2, 5, 3, 6, 8, will constitute our test and will be numbered I, II, III, IV, V, respectively. The exercises in full follow:

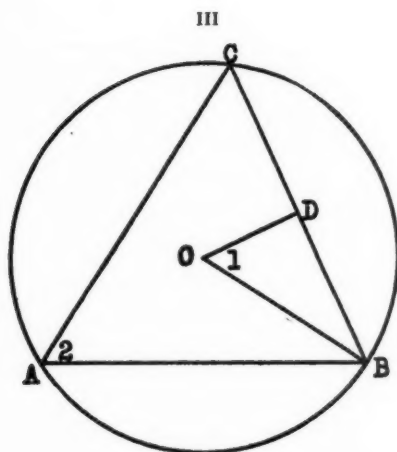


Given: The circle whose center is O , arc $AB = \text{arc } BC$, BM is perpendicular to AO , BN is perpendicular to OC . Make any additional drawings that are necessary to prove that $BM = BN$.



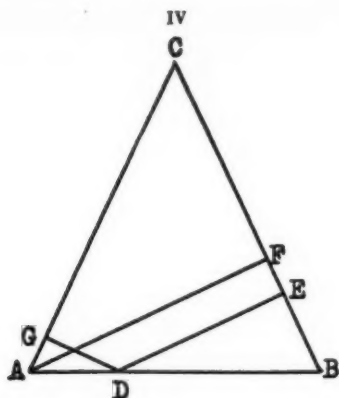
Given: AB is parallel to CD , and lines GE and FE meet in E .

Make any additional drawings that are necessary to prove that $\angle 2 = \angle 1 + \angle 3$.



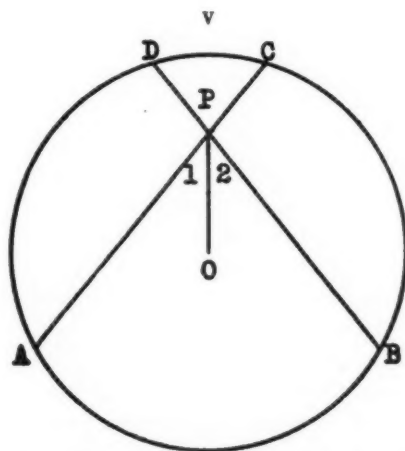
Given: Triangle ABC inscribed in a circle whose center is O , and OD perpendicular to CB .

Make any additional drawings that are necessary to prove that $\angle 1 = \angle 2$.



Given: The triangle ABC , $AC = BC$, D is any point on AB , DE is perpendicular to BC , DG is perpendicular to AC .

Make any additional drawings necessary to prove that $DG + DE = AF$.



Given: The circle whose center is O , chord $AC =$ chord BD , AC and BD intersect in P , and the line OP is drawn.

Make any additional drawings necessary to prove that $\angle 1 = \angle 2$.

A STUDY OF THE SOCIALIZED VERSUS THE ACADEMIC METHOD OF TEACHING WRITTEN COMPOSITION

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This investigation is a statistical study of the difference between two methods of teaching written composition in the high school—first, the socialized method, and second, the traditional academic method. It is based on some results of an experiment conducted in two Freshman classes in a large technical high school. Space is too limited to give details of the methodology. It is sufficient to say that particular care was taken in all respects to make sure that the results obtained by using the socialized method and the academic method would be comparable and would meet the requirements of statistical criteria.

COMPARISON OF THE TWO METHODS

A brief analysis and comparison of the two methods follow. In this analysis factors common to both methods, and factors which differentiate them are pointed out.

The following common factors were kept constantly the same throughout the experiment:

1. Suggestive subjects for composition.
2. Demonstration lessons.
3. The amount and kind of optional reading.
4. The amount and kind of reading required.
5. The method of correcting themes used by the teacher.
6. The number and kind of themes.
7. The qualities of excellence sought in each successive theme.
8. The aims, except the mode of expression to make them meet the requirements of the respective methods.

The socialized method and the academic method differ in the following fundamental respects:

1. The nature of the situations in which the learners are placed.
2. The nature of the problems growing out of the situations.
3. The form in which the themes are written.
4. The nature and amount of publicity given the compositions.
5. Controlling and directing the attention of the learner.
6. The nature of the stimuli which drive the learner to make the best use of his practice period.

The first sharp distinction between the socialized method and the academic method is the nature of the situation provided for the learner. The situation provided by the academic method is a series of practice periods. In these the learner is required to write themes in which the English is correct and effective. The socialized method, however, requires that a series of genuine and varying social situations be provided for the learner. They must be vitalized human situations providing for responses to all communications and favorable to the use of the social motives as one writes.

The second difference between the two methods is the nature of the composition problems growing out of the different situations. In the academic method the essence of the composition problem is to secure essential qualities in writing, such as correctness, clearness, fluency, unity, coherence, and proportion. The mechanics, elementary principles of general excellence, and devices are studied with a view to using in writing correct, fitting, and effective English on an assigned topic. The socialized situation, on the other hand, creates primarily a social problem. The task is to study mechanics, principles of general excellence, and devices for the express purpose of making the knowledge function in communicating thoughts and feelings growing out of one's experience so as to interest, please, benefit, or convince a prospective reader; for it is desirable that the response of the reader to the communication be pleasing to the learner.

A third difference between the two methods is the form in which the themes are written. The form provided by the academic method is the traditional one, requiring that the name of the learner, his classification, and the subject be placed in specified positions on the page, that pen and ink be used, that a margin be kept on the left, and so on. The form required in the socialized method is the type of letter suitable to the social situation and the nature of the communication.

The socialized method and the academic method differ also in the nature and amount of publicity given to the themes. Only the teacher reads the themes of the academic class, in a manner characteristic of the profession. Exceptions to this rule are sometimes made by having some of the best themes read in class. Moreover, the learner usually does not receive a satisfactory response, if any, to his composition. The socialized method provides for the same publicity as the academic method does, and more. Usually several classmates read each letter and one person gives his personal reaction to the communication in the form of a letter in reply.

The prime difference between the socialized method and the academic method is the difference in the procedure to control and direct the attention of the learner during the practice periods. In the academic method the attention is directed toward elements of excellence in writing, such as correctness, clearness, fluency, unity, coherence, and proportion. At one time the problem is to broaden and fix the knowledge of mechanics and principles of general excellence. At another time it is to carry this knowledge over in writing correct English on assigned topics.

In the socialized method, however, the attention of the learner primarily is the social problem of communicating his thoughts and feelings to his associates.

"What must I do to interest, please, benefit, or convince my prospective reader in a great enough degree to elicit his

praise and avoid his censure in his response" is the prime consideration. From this care the attention of the learner widens to include mechanics, general excellence and devices, for he soon discovers through experience that he must study them so that there will be a transfer of the excellence developed in their study, to help communicate his thoughts and feelings.

Growing out of the difference in the focus of attention is the last prime difference between the two methods, namely, the nature of the stimuli used. Thoughts arising from three sources constitute the stimuli which drive the learner who is supervised by the academic method, to his practice; first the desire to win the approbation of the teacher and to get good grades; second, the more or less undefined notion that in such practice the learner will develop the power to communicate all the thoughts and feelings that come to him, in correct, fitting, and effective English when there is a need; and third, some self-realization.

The stimuli which drive the learner who is supervised by the socialized method to his practice grow out of the following considerations: first, motives as given by Leonard¹; namely, The "story-teller" motive, the "teacher" motive and the "community worker" motive; second the desire to interest, please, benefit, or convince, to win praise and avoid criticism which in response to compositions: third; a keen realization that the best way to learn how to communicate one's thoughts and feelings in correct, fitting, and effective English, when the occasion requires it is to practice in genuine vitalized social situations, just as the best way to learn to swim is to practice in water, not in the air; fourth, consciousness of the utility and satisfying effect of the procedure; fifth, social realization; and sixth, the desire to win the approbation of the teacher and get a good grade.

¹ Leonard, S. A., *English Composition as a Social Problem*. Pp. 16.

Thus we see that there was an attempt to keep all of the important factors of learning the same in the two methods except the following which, being inherent in the socialized method, are not found in the academic method:

1. Vitalized social situations which may be varied to sustain the interest of the learner
2. Composition is primarily a social problem of communicating the thoughts and feelings of the learner.
3. The letter form appropriate for the occasion is the medium of communication.
4. The nature and amount of publicity given to the themes compel a higher type of response.
5. The attention of the learner is focused primarily on the problem of communication.
6. The following stimuli characterize the socialized method:
 - (a) The three dynamic social motives for communication: namely, the story-teller motive, the teacher motive, and the community-worker motive.
 - (b) The desire of the learner to interest, please, benefit, or convince a prospective reader in order to elicit praise and avoid censure.
 - (c) A keen realization that the best way to learn to communicate thoughts and feelings in correct, fitting, and effective speech is to practice in a vitalized social situation.
 - (d) Consciousness of the utility and satisfyingness of the procedure.
 - (e) Social realization.

DIRECT METHOD OF PROCEDURE

The experiment from which the materials for this study were obtained extended over a period of nineteen weeks. At the beginning of the experiment, first, a preliminary list was given to determine the relative standing of the two classes in the ability to write compositions. The application of statistical methods to the data indicated that the class taught by the socialized method had the ability to write themes having a greater degree of general excellence, and fewer mechanical errors per 1000 words at the beginning of the experiment.

Therefore, to determine the superiority of the socialized method over the academic method of teaching written composition we must show that the socialized class made substantially greater progress when measured by the same scales and standards.

Second, during the experiment five sets of routine themes were collected from each class at monthly intervals—September 20, October 16, November 13, December 15, and January 14. Three of each series were for Lessons I, II, and III, found in the specimen assignments. The routine themes in the socialized group aggregated 18,333 words; those in the academic group, 22,506 words.

From the analysis of the routine themes we get two compilations of comparable data, which we shall use to discover which of the two methods used was the more effective one for teaching written composition. Conclusions will be as follows:

1. That the class taught by the socialized method learned at a greater rate (a) to eliminate mechanical errors from their routine compositions, and (b) to write themes excelling in elements of general excellence.
2. That method is a decisive factor in teaching written composition.

MEASURING AND COMPARING RESULTS

Two bodies of comparable data were obtained by measuring two elements of progress in writing compositions: first, growth in the ability to eliminate errors from routine themes; and second, growth in the ability to write themes excelling in the elements of general excellence. To measure these two elements of progress in the two parallel series of routine themes collected from the two classes, it was decided to use the categories of error devised by R. I. Johnson, in his "A Study of Errors in English Composition" for the former, and the Harvard-Newton Scale for the latter.

¹ See the thesis for the rest of the investigation.

Johnson's Categories of Error are set forth in Table III.

TABLE III
SHOWING JOHNSON'S CATEGORIES

- I. Mistakes in the Case of Pronouns:
 1. Subject or object of a verb in the wrong case.
She saw my brother and I.
 2. Predicate nominative in the wrong case.
I do not know whom it is.
 3. Object of a preposition in the wrong case.
They called to my friend and I.
 4. Use of objective for possessive with gerund.
It was all the result of that cat crossing my path.
- II. Other Misuses of Pronouns:
 5. Disagreement of pronoun and antecedent.
A person can find what they look for.
 6. "You" used indefinitely.
When you start to high school you feel important.
 7. Miscellaneous misuses of the pronoun.
A lady which etc.
- III. Mistakes in the Use of Verbs:
 8. Disagreement of the verb and subject.
On the bank was some lilies.
 9. Change of tense in main clause.
 10. Wrong past tense or past participle.
We had drank.
 11. Wrong verb used. *I will lay down.*
 12. Mistake in mood. *He acted as though he was a king's son.*
- IV. Mistakes in the Use of Adjectives and Adverbs:
 13. Use of adjective for adverb.
He spoke respectful.
 14. Use of "Most" for "almost."
I go most every time.
 15. "Only" misplaced in the sentence.
I only had one lesson to study.
 16. The use of the double negative.
There wasnt hardly room for me.
 17. Miscellaneous uses of adjectives and adverbs.
It was a very healthy food.

TABLE III (continued)

- V. Mistakes in the Use of Prepositions and Conjunctions:
18. Use of wrong or superfluous preposition.
He got off of the car.
 19. Use of the wrong conjunction
The reason was because etc.
 20. Misuses of "like."
It looks like he wasn't coming.
- VI. Ungrammatical Sentence Structure:
21. Incomplete sentence.
 22. Failure to make new sentence for new thought.
 23. Miscellaneous mistakes in sentence structure.
- VII. Failure to Express Clear Meaning:
24. Ambiguity due to indefinite pronominal reference.
He had to eat olives with the Smith girls although he did not like them.
 25. Awkward, wordy, or complicated phrasing.
 26. Other cases of failure to express clear meaning.
Her mother cooked a dozen of eggs and twice as much bacon.
- VIII. Mistakes in Punctuation:
27. No period.
 28. Members of a series not separated.
 29. Independent clauses of a compound sentence not separated.
 30. No punctuation after an introductory expression.
Well how are you.
 31. Name of city and state written without punctuation.
Kansas City Missouri.
 32. Miscellaneous mistakes in punctuation.
- IX. Mistakes in the Use of the Apostrophe:
33. Failure to distinguish between "its" (it is) and "its" possessive.
The bird will not do it's best singing if its a hot day.
 34. Wrong form of possessive nouns.
There was a sale of ladie's dresses.
 35. O'clock written without an apostrophe.
 36. Miscellaneous misuses of the apostrophe.
I dont know.
- X. Mistakes in Capitalization:
37. Failure to use capital letters.
 38. Improper use of capital letters.

TALE III (continued)

XI. Careless Omissions or Repetitions:

- 39. Omission of word or phrase.
- 40. Omission of letter or syllable.
- 41. Repetition of syllables, words, or phrases.

XII. Mistakes in Spelling:

- 42. Compound words incorrectly written.
- 43. Misspelling of "to", "too", and "two".
- 44. Misspelling of "there" and "their".
- 45. Other misspelled words.

XIII.

- 46. Misuses of Quotation Marks.

XIV.

- 47. Miscellaneous errors, Doctors, lawyers, teachers, etc.

I. MECHANICAL ERRORS

Table IV. shows the distribution of the errors in each of the series of themes collected at monthly intervals from both classes, Johnson's Categories being used as the scale. In Table V we note that 4,328, 3,646, 3,250, 2,526 and 6,583 represent respectively the number of words in the five sets of letters obtained from the socialized group, and that 4,272, 4,153, 3,957, 2,133, and 7,981 represent respectively the number of words in the five sets of academic themes. The socialized sets aggregate 18,333 words; the academic sets, 22,506 words. So, dropping out of account for the time being the last series in each group, we find the total number of words in the parallel sets is nearly enough alike in each case to show characteristic differences. In general the decrease in the number of mistakes in almost all of the categories under the socialized method is more pronounced and uniform than under the academic method.

The first characteristic points to a greater rate of learning in favor of the academic method; while the second points to differences in the manner of learning favorable to the socialized method. The nature and cause of these differences will

TABLE IV
SHOWING OF ERRORS IN THE FIVE SETS OF ROUTINE THEMES RECEIVED
FROM EACH CLASS, BY JOHNSON'S CATEGORIES

Primary Classes of Errors	SOCIALIZED METHOD, 18,333 Words						ACADEMIC METHOD, 22,506 Words					
	Sept. 20	Oct. 16	Nov. 13	Dec. 15	Jan. 14	Total	Sept. 20	Oct. 16	Nov. 13	Dec. 15	Jan. 14	Total
I.....	...	2	...	...	4	6	1	2	1	2	...	6
II.....	15	13	4	1	13	46	14	24	4	12	11	65
III.....	33	23	12	12	21	101	24	26	17	6	42	115
IV.....	6	9	5	2	2	24	12	15	15	5	15	62
V.....	10	7	9	6	9	41	8	18	16	14	22	78
VI.....	40	24	20	20	49	153	75	63	65	21	92	316
VII.....	26	24	8	4	10	72	29	22	24	12	41	128
VIII.....	84	43	55	38	76	296	83	76	50	45	113	367
IX.....	13	9	9	5	17	53	15	7	10	4	20	56
X.....	20	17	6	4	24	71	43	34	15	9	49	150
XI.....	15	16	7	5	14	57	14	24	14	9	37	98
XII.....	16	26	22	12	36	112	35	38	40	19	118	250
XIII.....	4	...	1	5	5	15	5	5	8	5	9	32
XIV.....	13	...	7	10	26	56	25	9	16	14	31	95
Total.....	295	213	165	124	306	1103	383	363	295	177	600	1818

TABLE V
SHOWING THE NUMBER OF ERRORS PER 100 WORDS IN EACH
OF THE SETS OF THEMES

DATE	TYPE	SOCIALIZED METHOD			ACADEMIC METHOD		
		Words	Errors	Errors per 100 Words	Words	Errors	Errors per 100 Words
Sept. 20.....	Narration	4,328	295	6.8	4,272	383	8.9
Oct. 16.....	Exposition	3,646	213	5.8	4,153	363	8.7
Nov. 13.....	Narration	3,250	165	5.1	3,957	295	7.5
Dec. 15.....	Description	2,526	124	4.8	2,133	177	8.0
Jan. 14.....	Narration	6,583	306	4.6	7,981	600	7.6
TOTAL.....		18,333	1103	27.1	22,506	1818	40.7

be investigated in the pedagogical interpretation. Amplification may be found in the section on Pedagogical Interpretation pp. 61-75 of the Theses.

Table VI, however, will show a more detailed analysis of the situation. It is compiled from Table VIII, using the

TABLE VI
SHOWING TOTAL FREQUENCY OF MECHANICAL
ERRORS ON THE BASIS OF 22,506 WORDS
FOR EACH GROUP

Primary Classification of Errors	Socialized Method	Academic Method
I.....	7	6
II.....	56	65
III.....	124	115
IV.....	29	62
V.....	50	78
VI.....	188	316
VII.....	88	128
VIII.....	361	367
IX.....	65	56
X.....	87	150
XI.....	70	98
XII.....	37	250
XIII.....	18	32
XIV.....	68	95

numbers which show total frequencies for the primary classes of errors.

Table IX shows that the total frequency of errors under the socialized method is for 18,333 words; that under the academic method for 22,506 words. But to compare results we must express both frequencies in terms of the same number of words. Assuming then that the ratio of errors in each category made by the socialized group would have been the same had the number of words written by it been 22,506, we

Number of
Errors in the
Categories.

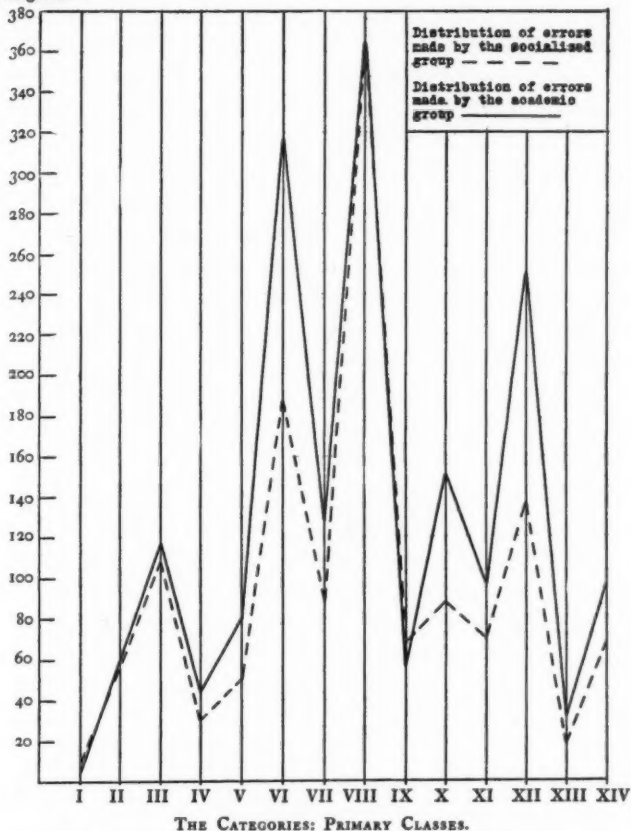


DIAGRAM I. Frequency polygons showing distribution of mechanical errors in the routine themes.

shall multiply the total frequency for each category in the vertical column of totals under the socialized method in Table VIII by $\frac{22,506}{18,333}$ to get frequencies comparable to the total frequencies in the vertical column under academic method in Table VIII. The result is Table X.

The frequencies in Table VI are single numbers to represent the accomplishments of the socialized group and the academic group respectively in eliminating mechanical errors from their written compositions. In only three categories,—first, third, and ninth did the academic group make fewer mistakes than the socialized group did, the difference being slight in each case. In all the other categories the socialized group made fewer mistakes than the academic group, the difference being more pronounced in many cases.

Diagram I shows the comparison graphically. The model number of errors in each group is found to be in Category VIII, that is, in punctuation. In both groups there is a distinct tendency for the errors to pile up at two other points, VI and XII respectively. This means that both groups made many mistakes in sentence structure and in spelling. Taking the area between the two frequency polygons to represent the difference in amount of error made in writing the routine themes, we find in this diagram as in the tables considered that the socialized class made substantially less amount of error in writing the routine themes than the academic class did. The simple arithmetic mean of the average number of errors made by the academic group at the end of each monthly interval is 8.14; by the socialized group, 5.42.

We have shown that the amount of mechanical error made by the academic group in writing routine themes was uniformly and substantially greater than what was made by the socialized group. Second, we have pointed out that Table XII indicates a substantial difference in the manner and rate of learning in the two classes, favorable to the socialized method.

Diagram II made from Table V throws more light on the difference in the manner and rate of learning in the two groups. Graph A indicates the manner and rate of learning in the socialized group; graph B, the manner and rate of learning in the academic group. The regularity of graph A shows that

the manner of learning was favorable to gradual and substantial progress. The graph represents a negatively accelerated curve which shows that the rate of learning was greater at the beginning than at the end of the experiment. The general direction of the graph indicates a uniform and substantial rate of learning. The numbers 6, 8, 5.8, 5.1, 4.8, and 4.6 show respectively the number of errors per hundred words at each monthly interval.

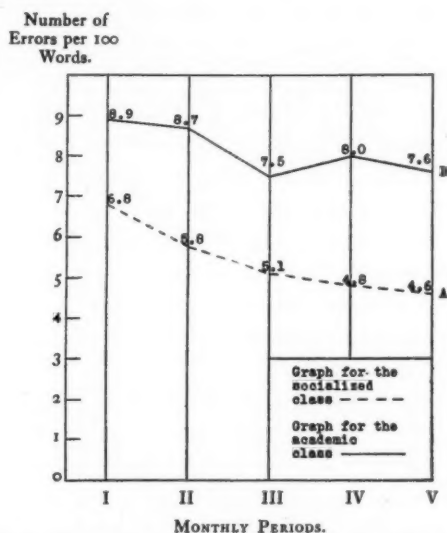


DIAGRAM II. Graphs indicating rate and manner of learning in the socialized and the academic class, in eliminating mechanical errors from routine themes.

Graph B represents a fluctuating negatively accelerated curve. The fluctuations point to factors in the academic method unfavorable to the best manner of learning. The general direction of the graph indicates the rate of learning. Numerically this rate is indicated by 8.9, 8.7, 7.5, 8, and 7.6,—respectively the number of errors per 100 words made at the end of each monthly interval.

¹The difference in the regularity of the graphs indicates a difference in the manner or character of the progress of learning, in favor of the socialized method. This difference is due to factors in the socialized method which lead to a more efficient disposition of the time in the practice periods. The learning was more sustained in the socialized group.

The difference in the direction of the two graphs shows that the rate of learning was greater in the socialized group. Two and one-tenth units on the scale represent the difference in the ability of the two classes at the beginning of the experiment to write English relatively free from mechanical errors; these units represent the difference at the end. The range in the rate of learning is 2.2 units for the socialized group and only 1.3 units for the academic class. Apparently at no point does the academic group approach nearer to the socialized group in accomplishments, than at the beginning. It seems certain, therefore, that the class taught by the socialized method learned at a greater rate than the academic class, when we use accuracy or the elimination of mechanical errors as the standard.

Up to this point we can record three findings: first, that the class taught by the socialized method made substantially fewer mechanical errors in all but three of the fourteen categories; second, that the socialized class learned to eliminate mechanical errors at a substantially greater rate than the academic class did; and third, that there was a decided difference in the manner of learning which was a factor² in the greater rate made by the socialized class.

2. GENERAL EXCELLENCE

The second way to determine which method obtained the better results is to analyze the data obtained by using the

¹ The statements in this paragraph are supported in the section entitled Pedagogical Interpretation pp. 61-75 in the Theses.

² See section in the thesis entitled Pedagogical Interpretation.

TABLE VII
SHOWING FREQUENCY DISTRIBUTION OF PERCENTILE GRADES OF THE
ROUTINE THEMES ACCORDING TO HARVARD-NEWTON SCALE

Class Interval	Med. Point	A. FREQUENCIES: SOCIALIZED METHOD								
		Sept. 20	Oct. 16	Nov. 13	Dec. 15	Jan. 14	Total	Computations		
92.5-97.49	95	.....	2	4	4	3	13	M ¹	74.35	
87.5-92.49	90	1	5	3	1	4	14	M ²	79.13	
82.5-87.49	85	3	2	3	5	5	18	M ³	82.99	
77.5-82.49	80	5	3	7	8	6	29	M ⁴	82.	
72.5-77.49	75	6	5	2	2	2	17	M ⁵	83.	
76.5-72.49	70	4	2	2	1	2	11	Md ¹	76.4	
62.5-67.49	65	2	3	2	1	1	9	Md ²	78.37	
57.5-62.49	60	.....	1	.....	1	.....	2	Md ³	81.79	
52.5-57.49	55	1	.....	.....	.....	.....	1	Md ⁴	81.56	
47.5-52.49	50	1	.....	.....	.....	.....	1	Md ⁵	83.	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ¹	7.04	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ²	9.82	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ³	10.2	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ⁴	10.1	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ⁵	10.8	
		B. FREQUENCIES: ACADEMIC METHOD								
		Sept. 20	Oct. 16	Nov. 13	Dec. 15	Jan. 14	Total	Computations		
92.5-97.49	95	.....	.....	1	1	1	3	M ¹	72.39	
87.5-92.49	90	3	1	3	2	1	10	M ²	73.91	
82.5-87.49	85	1	2	3	2	2	10	M ³	76.	
77.5-82.49	80	4	5	2	3	4	18	M ⁴	74.	
72.5-77.49	75	4	6	4	4	6	24	M ⁵	74.	
76.5-72.49	70	3	4	5	4	5	21	Md ¹	73.1	
62.5-76.49	65	3	1	3	4	2	13	Md ²	74.6	
57.5-62.49	60	2	2	1	2	1	8	Md ³	75.6	
52.5-57.49	55	2	1	1	1	1	6	Md ⁴	72.6	
47.5-52.49	50	1	1	.....	.....	.....	2	Md ⁵	74.6	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ¹	9.4	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ²	7.4	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ³	8.6	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ⁴	9.43	
.....	.....	.....	.....	.....	.....	.....	.....	M. D. ⁵	8.	

Harvard-Newton Scale to measure general excellence found in the routine themes collected at monthly intervals.

Table VII shows the distribution of the percentile grades given to the routine themes by using the Harvard-Newton Scale. The grades are grouped so as to provide class-intervals of five. This device gives practically continuous distribution and provides a wide enough range to show "spread."

A comparison of the two distributions reveals these facts: The range of each distribution is the same for each class at the beginning of the experiment, being from 47.5 to 92.49. At the end of the experiment the range is 62.5 to 97.49 for the socialized class and from 52.5 to 97.49 in the academic group. Thus the socialized method produced a greater narrowing of range, and a greater tendency for the measures to shift progressively toward the higher end of the scale.

A comparison of the averages shows the same result. The arithmetic means for the successive socialized series are 74.35, 79.13, 82.99, 82, and 83 respectively. Similarly the arithmetic means for the academic series are 72.39, 73.91, 76, 74, and 74. The medians for the socialized series are 76.4, 78.37, 81.79, 81.56, and 83; those for the academic series, 73.1, 74.6, 75.6, 72.6, and 74.6 respectively. Thus we see that in each successive series the point on the scale above which approximately one-half of the measures are found is respectively higher in the socialized group than in the academic group, and that the successive points in the socialized group are relatively higher than in the academic group. It seems certain, therefore, that there must have been superior factors operative in the socialized method to bring about relatively more desirable change in the central tendency in the socialized group.

There are also evidences in Table VII of differences in the manner of learning as it progressed in the socialized group and the academic group, favorable to the socialized method. There

is a greater fluctuation in the frequencies from series to series in the academic method than in the socialized method. This inspection is substantiated by the mean deviations; they fluctuate more in the academic method than in the socialized method. For the socialized method they are 7.04, 9.82, 10.2, 10.1 and 10.8; and for the academic method 9.4, 7.4, 8.6, 9.43 and 8. Again we see evidences of factors in the socialized

Number of
Pupils.

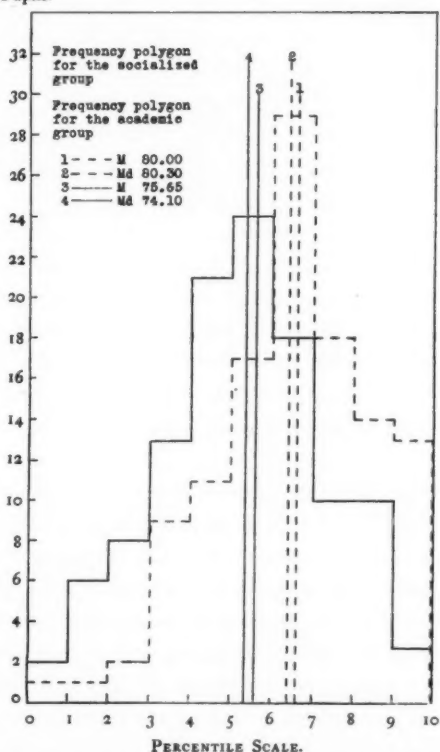


DIAGRAM III. Frequency polygons showing the distribution of the total number of grades in each interval in the vertical column in Table XI headed "Total."

method which made it possible for the learners in the socialized group to use their practice periods more effectively.

Diagram III shows graphically the distribution of all the grades given in each class on the basis of the totals given in Table VII. Frequency polygon marked with a broken line shows the shape of the distribution of the grades given to all of the routine themes written by the socialized group; the frequency polygon marked with a solid line shows the distribution of the grades given to all of the routine themes of the class taught by the academic method. The arithmetic mean, the median, and the modal number of grades for the socialized group fall within the interval 77.5-82.49, whose mid-point is 80, 80.3 and 80. The corresponding averages for the academic group are 75, 65, 74.1 and 75, all being found in the class-interval 72.5-77.49. In the academic group, therefore, measures are highly concentrated within and around interval 72.5-77.49 whose mid-point is 80; whereas in the socialized group, they are piled up in and around interval 77.5-82.49. The outstanding characteristics of the distributions show, therefore, that during the course of the experiment the socialized class showed distinctively greater power to write compositions when judged by the standard of general excellence.

In Diagram II of the theses we have frequency polygons showing the distribution of grades given in the preliminary test. A comparison of the shape of the distributions there and in Diagram III seems to indicate a greater rate of learning in the socialized group. The arithmetic mean and median of the socialized group for the preliminary test were 73 and 75; for all the routine themes according to Diagram V, 80 and 80.3. The corresponding averages of the academic group for the preliminary test were 72 and 74; for all the routine themes, 75.65 and 74.1. A greater rate of learning is indicated in the

socialized group by the greater shifting of measures toward the high end of the scale. There must be factors in the socialized method which will account for this shifting of measures.

Assuming that in this experiment the arithmetic mean of each series is the best measure of the attainment of the group in learning to write to get general excellence we construct

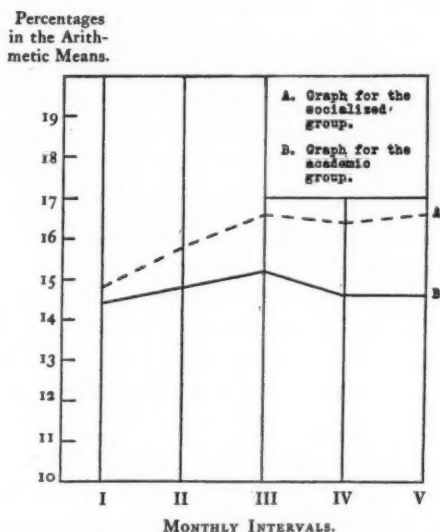


DIAGRAM IV. Graphs indicating rate and manner of learning to write themes conforming to the elementary principles of general excellence, in the socialized and the academic class.

graphs A and B, Diagram IV, using monthly intervals for the horizontal, ordinate and percentile units in the means for the vertical ordinate. The arithmetic means for the successive series of themes in each class are given in Table VII in the vertical column under computations. Graph A then indicates the manner and rate of learning of the socialized group, and B of the academic group.

The general make-up of graph A indicates the manner of learning. It represents a negatively accelerated curve. The progress in learning was much greater during the first three months. Apparently there is a slight lapse in the fourth month. The general direction of the graph indicates the rate of learning in the socialized group. There is a perceptive plateau at the end.

Graph B is also negative accelerated of the same general type as A. The plateau at the end is more pronounced.

The difference in the make-up of the two graphs indicate a difference in the manner of learning. The curve represented by A is more uniformly accelerated than the curve represented by B. There is in B a more pronounced plateau at the end.

The difference in the direction of the two graphs shows a greater rate of learning in the socialized group. One and ninety-six hundredths units indicate the difference in accomplishment at the beginning. At the end of the experiment, however, 9 units on the scale represents the difference in accomplishment. At all points along the graphs, graph A is higher above the starting point of the graph than the corresponding point on B is above the starting point of graph B. The difference in the rate of learning may be indicated numerically by the successive arithmetic means of the two classes, which represent the attainment of each group at the end of the corresponding monthly interval. For the socialized group the means are 74.35, 79.13, 82.99, 82, and 83; for the academic group 72.39, 73.91, 76, 74, and 74.

The interpretation of the foregoing data indicates: first, that, in general efficiency, the themes written by the socialized group excelled those written by the academic group; second, that the factors indigenous to the socialized method caused the pupils taught by that method to learn at a substantially greater rate than did the pupils taught by the academic method.

CONCLUSIONS²

As a result of the foregoing study the following conclusions are submitted:

1. Method is a decisive factor in teaching written composition.

2. The following hypothesis is offered for further investigation: The most vigorous, uniform, and economical growth in the power of pupils to communicate all of the thoughts and feelings that come to them from the widening field of their experiences, in correct, fitting, and effective written speech can be attained best using a method built on these two primary factors:

a) Focus the attention of the pupils primarily on the social elements of the composition problem, but permit it to widen to include the functional mechanics, principles of general excellence, and devices as they are found necessary.

b) Use primarily a group of social stimuli such as the following: First, the socially inherited motives formulated by Leonard; namely, the story-teller motive, the teacher motive, and the community-worker motive; second, thoughts growing out of the desire to please, benefit, interest or convince a prospective reader so as to merit praise and avoid censure in the response to the communication; and third, thoughts growing out of the realization that something beneficial and useful is being learned.

One particular method of procedure stripped of all the nonessentials would be as follows:

First: Discover as many varying, vitalized, social situations as one can, touching the current experiences as well as the past experiences of the pupils. This is necessary in order that a certain amount of freshness may accompany the suc-

² In one of the primary sections of the theses proper entitled, *Pedagogical Interpretation*, it was shown that the difference in the rate of learning favorable to the socialized group is due to the factors which characterize the socialized method. They were given on page 114.

cessive composition problems, which grow out of the vitalized situations. Use a type of letter suited to the occasion, as the medium of communication, in order to remind the pupils constantly that they are actually dealing with the problem of communicating their thoughts to a reader who will, in turn, communicate a worthwhile response.

Second: Build up a body of composition themes and projects which will invite the use of the socialized stimuli. A loose classification of the sources of topics follows:

- a) School and student activities and interests.
- b) Vocational interests, plans and activities.
- c) Home, community, and civic interests and activities.
- d) Students' leisure interests and activities—amusements, vacation trips, vacation experiences, recreation and the like.
- e) Acceptable reading provided the exercises are based on vital content setting forth experiences of others which pupils can enter into imaginatively or vicariously.
 - 1. Questions of conduct.
 - 2. Conversations and dramatizations.
 - 3. Questions of general public interests.
- f) Experiences and stories told by others.
 - 1. Interviews.
- g) Proverbs and general statements teaching the experiences of pupils.

Third: Set up a group of aims which appeal to the pupils as rich ends and which constitute one unit of an unbroken progressive process of learning to write.

Fourth: Develop a body of demonstration lessons that will illustrate the method of attacking various phases of the composition problem, such as, 1: how to think through a subject, choose material for a given social purpose, and organize it in the form of an outline preparatory to writing; 2: how to choose and arrange details to lead up to and interpret a crucial experience in life; 3: how to identify and eliminate errors and

bad practices found in the first draft of sentences and compositions; 4: how to identify and get the elementary principles of general excellence in actual writing; 5: how to build thought in the paragraph, etc. Use the best one to illustrate the details of attack to be made on a given assignment.

Fifth: Use a group social stimuli best suited to supervise in an indirect way the practice periods in order to secure a transfer of the increasing knowledge of mechanics, devices, and principles of general excellence to the process of actual writing.

Sixth: Build up a functioning body of minimum essentials in mechanics, and principles of general excellence and stress them as necessary means of attaining the greater ends.

Educational News and Editorial Comment

APPOINTING A SUPERINTENDENT OF SCHOOLS IN CHICAGO

The Board of Education of the city of Chicago has adopted a method of electing a superintendent which has often been discussed but has never before been put into practice. This method consists in inviting a commission of representative citizens to canvass the field and decide on the candidate who seems to fulfil most completely the demands made by this position. The Board of Education hopes by this method to avoid all of the political influences which so frequently enter into the election of a superintendent. It hopes to give a kind of prestige to the new appointee which would not be secured by electing him in routine fashion. This prestige will grow out of the fact that the citizens' commission will canvass the whole country and will decide on the merits of candidates without

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any of the prejudices that arise from earlier participation in school matters which it must be admitted have been involved in the city of Chicago in all sorts of political entanglements.

The commission includes representatives of all of the leading types of citizens. There are two bankers, one of whom is at the head of the commission; there are two lawyers representing different phases of social and political belief; there is a representative of labor, a manager of one of the great retail establishments, a woman closely connected with the juvenile court and related interests, a leading physician, and a man of large business experience in manufacturing.

This commission of nine has gone about its work systematically and is making inquiries of leading educators in all parts of the United States, securing their opinion as to suitable candidates. Later the list of candidates will be sifted and a definition will be arrived at of the qualities most needed in a superintendent. The commission is including in its inquiry a number of school people connected with the Chicago system. The acting superintendent of schools who succeeded Mr. Shoop was called into conference and gave the commission the benefit of his experience while in office and will thus help the commission to arrive at a more intelligent notion of the duties which must be carried by the man of their selection. It is understood that the Board of Education is committed to an acceptance of the findings of the citizens' commission.

The procedure thus adopted by the Chicago Board of Education indicates a new realization of the importance of the superintendency in the school system. Two years ago there was adopted by the Illinois legislature a new school statute which for the first time in the history of the city gave to the superintendent of schools a clearly defined legal status. Prior to that time the superintendent had only the authority that from time to time was granted by the Board of Education. His position was virtually that of a head teacher, and there was

the greatest uncertainty with regard to his influence in the school system. The new statute defines the major lines of activity and authority of the superintendent and gives him a tenure of four years. The new statute does not fully define the relation of the superintendent to the business manager, and in this respect there are certain ambiguities in the school situation which will have to be cleared up by rules adopted by the Board of Education. The new statute goes much farther than any which has ever been in force in Chicago before, and it gives the new superintendent an opportunity to work out in a large way comprehensive plans of organization.

It is to be hoped that the example of the Chicago Board of Education in its effort to remove this appointment from politics will stimulate imitation in many quarters. If the experience of Chicago is satisfactory, it is not unlikely that this mode of selecting a superintendent will commend itself to other municipalities.

ORGANIZING THE HIGH SCHOOLS OF NEW HAMPSHIRE

Superintendent Butterfield of the state of New Hampshire is carrying forward the vigorous policies of his predecessor in making the high schools of that state contribute as largely as possible to the needs of young people who are going into the practical walks of life. He has recently addressed to the high schools of the state a series of vigorous statements dealing with some of the problems that he regards as most important. Two of these statements we may quote because they not only apply to the schools of New Hampshire but present general policies in a form which ought to attract the attention of high schools in all states. The first of these statements has to do with the English course. Superintendent Butterfield says:

An enormous amount of time is now wasted in our English classes. Schools are advised to reorganize these classes so that all the work now planned may be done in three years.

The question arises as one reads this statement whether Superintendent Butterfield has gone far enough. If a good deal of time is wasted, the reduction of the course by one fourth furnishes no full guaranty that the wasted time will be saved. Furthermore, there is another method of dealing with this wasted time which ought to be considered. The combination of English courses with courses in history and civics which would supply suitable content might prevent the waste which is here pointed out so vigorously. At all events, Superintendent Butterfield has rendered a service in calling attention in this official way to the fact which has been emphasized by all of the critics of English courses. If English teachers can be made aware of the fact that administrators are to deal in a drastic way with a situation which exists, they may be stimulated on a larger scale than at present to reorganize their work.

The second statement made by Superintendent Butterfield which may be quoted has to do with the introduction of home economics and is as follows:

It can no longer be doubted that it is the duty of all schools to require of all high-school girls, except those fitting for special college requirements, four full courses in domestic arts. This should not mean extra work for the girls, but these courses should replace traditional courses in mathematics, science, foreign language, or history, and should be taken parallel with the required Latin, French, or commerce courses of the chosen curricula. Girls should not be required to take the ordinary physics and chemistry, as both of these subjects are covered in a concrete way in the regular domestic-arts courses.

The question which is suggested by this statement relates to the difference between the educational requirements of girls who are fitting for college and those who are seeking a general education. If it is educationally advantageous that one group of girls should have courses in home economics, why should an exception be made in view of college-entrance requirements? Why should secondary-school people not unite in demanding

that college requirements which do not conform to the educational needs of girls be modified? Until secondary-school people and school officials are ready to take the position that home-economics courses are an essential part of the curriculum of all girls, there will continue to be a distinction of the type suggested in Superintendent Butterfield's phrase. So long as a distinction of this sort is made, the question will always arise whether home economics is a subject as worthy of attention as the academic courses traditional in the schools. If, on the other hand, it is sincerely believed that these courses are an educational necessity in the schools, it seems likely that administrators and teachers will find ways of developing the content of the courses so that they shall be in all respects equal in quality to the traditional academic courses.

JUNIOR HIGH SCHOOLS

There are clear evidences that the junior high-school movement is passing into what may properly be described as its second stage. The first stage was that in which the organization of such a school was vigorously urged by its advocates, and school boards and school people were inquiring as to the justification for reorganization. During that period there was a great deal of miscellaneous experimenting. Books that had formerly been employed in high schools or elementary schools were carried over into the junior high school without serious effort to modify the contents of these books. The methods familiar to teachers either in the upper grades or in the first year of the high school were employed without serious modification in the new division of the school.

These hasty efforts to reorganize the school without complete reorganization of the material are now being succeeded by a more careful effort to rearrange the work of the schools. Numerous courses of study are beginning to appear which deal in detail with this new unit of the school system. There is

still disagreement among the various writers of these outlines as to the purpose of the junior high school and as to the material which is appropriate for use in instruction in the classes, but out of the discussions there is beginning to come much greater clearness in the definition of the junior high school as it is worked out in different centers. We shall be in a position shortly, therefore, to state what a junior high school is, at least in certain centers, through an appeal to the documentary material thus produced.

The State Department of Public Instruction of Utah has issued a complete statement of the course of study for elementary schools and junior high schools. One paragraph from the introduction to the course of study for the junior high schools may be quoted as setting forth the very definite theory with regard to this organization:

The junior school, besides completing and fashioning the tools of education, should stand for certain definite achievements. It should provide vocational work and guidance to help the student find himself and should afford him actual practice in the rudiments of the occupation which he expects to follow. It should insure the functioning of effective habits of health, moral control, and social activity. A high appreciation of the ideals and esthetic values of life should be acquired. The student should be held to high achievements of accuracy and skill in such subjects as spelling, penmanship, oral reading, language work, number combinations, and business operations in arithmetic, and should develop a high degree of efficiency and thought power in silent reading, elementary science, geography, and history and civics. In addition to the above, the program should be rounded out through providing for music, art, and recreation. The completely organized junior school will offer also some optional subjects such as foreign languages, commercial forms, and typewriting.

By way of contrast with the Utah definition one may cite the pamphlets issued by the school system of Neodesha, Kansas. Pamphlets were issued by that school system during the last year covering such matters as Latin and Latin-English in the junior-senior high school, general science, and a course in junior

high-school English. These courses, worked out in great detail, indicate that the dominant influence has been not the practical considerations that are expressed in the Utah program, but rather the academic interests that commonly guide the organization of courses in high schools. A paragraph from the introduction to the Latin-English course will perhaps serve as an example of the spirit in which these courses are organized:

The Latin-English three-year course in the Junior High School has been designed, as it has been stated in the English course of study, for pupils of superior ability and for those pupils who intend to continue their education beyond the high-school age. If, however, the aims of the course and the arguments underlying them be tested and justified, there is no reason why other pupils should not profit by the course. The amount of work offered could always be suited to the capacities of the pupils. The English and Latin departments of the high school are co-operating in endeavoring to work out this course; but as yet no claims are made for it other than the earnestness of this endeavor and the fact that the course has so far proved itself that it seems best to write it down in its incomplete and changing form.

GENERAL EDUCATION BOARD

In the forthcoming report of the secretary of the General Education Board a series of activities undertaken by the Committee on Educational Studies will be mentioned exhibiting in a very interesting way a variety of educational problems which are being dealt with by the Board. Two new state surveys are being undertaken, one in Delaware and one in North Carolina. A new type of survey is being inaugurated in studies to be made of the organization and needs of Yale University and Middlebury College. In these two cases the survey idea is being carried over into the field of higher education. It is suggested in the report that other institutions may find it advantageous to have a survey made of their financial and educational operations. The Board is assisting a committee of the National Education Association which is dealing with schoolhouse construction. Especial mention is made of educa-

tional investigations such as those of Professor Freeman concerning handwriting and Professor Whipple concerning exceptional children. Hampton Institute and Tuskegee Institute have both been surveyed and will be reported on in full. One of the most important and interesting inquiries carried on by this committee is now being fully reported in the volumes dealing with the Gary Survey. Mention was made of this survey in the last number of the *Journal*, and it is appropriate at this time to add to that preliminary statement some reference to the content of the report itself.

GARY SURVEY

In the four volumes which have thus far appeared in the report of the Gary Survey, Mr. Flexner has made it clear that he and his colleagues regard the ideas that are embodied in this system as matters of major importance. Even where the system has not achieved all that it set out to achieve, it has seemed to the surveyors worth while to comment in great detail upon the principle which underlies the effort of the schools. We have this attitude expressed not only in the preliminary statements made by Mr. Flexner in each of the volumes, but also in the statement which he has written in the report of the General Education Board which is about to appear. In that report Mr. Flexner states definitely that the two contributions that Gary has made to modern education are, first, the enrichment of the course of study and, secondly, a duplicate type of organization which makes it possible to carry on in a single school building a great variety of activities, utilizing the space of the school building somewhat more fully than is common in the ordinary type of school.

It seems to the present writer important to discriminate somewhat more clearly than Mr. Flexner has done between an idea which can be carried out in practical form and one which cannot. An idea may be broad and comprehensive without

being good. Thus all of the reports with regard to Gary have made it clear that the Gary school system provides in addition to the fundamental subjects, shopwork, courses in music and dramatics, and much training in physical lines and play. In his secretary's report Mr. Flexner makes the statement: "The quality of the work leaves something to be desired; but experience will probably suggest the improved supervisory processes by which improvement up to the necessary standard may be secured."

The question which instantly arises in the minds of schoolmen when they visit Gary is suggested by this comment. It is indeed desirable that the course of study should be enriched, but there are undoubtedly limits beyond which the course of study cannot carry children. Unless the quality of work in reading and other fundamental subjects can be maintained, the so-called enrichment of the course of study must be looked upon as an unwise expansion rather than a genuine educational reform. The fact is that the quality of instruction in the fundamental subjects in Gary is deficient. If one may use an analogy from physical life, one may compare the situation to that of the feeding of children. It is indeed desirable that children should have a varied diet and that they should assimilate as much as they can during the period of growth from a generous diet, but no one would think of attempting to feed children so much that it disturbs digestion, and no one would look upon a diet so enlarged as to bring about this unfortunate result as an advantage. The limitations, therefore, upon enrichment are set by the possibilities of assimilation. Not only so, but the preparation of the diet is a matter of major importance. No one has a right to offer to a child material which in itself is promising but which in its preparation has been rendered unfit for assimilation.

There can be no doubt at all that the schools of the United States have in the past been too conservative in admitting

new material into the curriculum, and everyone ought to join in the effort to enlarge the curriculum as rapidly as it can be done through material properly prepared and properly presented. If the requirements of proper preparation are fully emphasized, there need be no withdrawal at all of praise and commendation from the Gary system for having enlarged the course. There need, on the other hand, be no failure to recognize the fact that a reckless enlargement of the course is not a matter to be set before the schools of the United States as an example for imitation.

The second point made in Mr. Flexner's report, that the duplicate system is a form of organization which is very advantageous to all the schools, can also be accepted as fully supported by the survey. The volume prepared on organization and administration in the Gary Survey by Professor Strayer and Mr. Bachman discusses in detail the advantages of this duplicate system. Professor Strayer's report brings out with clearness one point which will be carefully studied by schoolmen throughout the country and should be made emphatic to boards of education. This point can be no more lucidly made than it is in the summary paragraph in Professor Strayer's report, which is as follows:

Expenditures for administration and supervision, plant operation and upkeep, instructional equipment and supplies will be heavier in schools like Emerson and Froebel than in conventional schools. The building and building equipment cost, aside from what may be spent on outside facilities, will be approximately 5 per cent higher, and there are good reasons to believe that the instruction cost may be about 6 per cent higher. Comparative expenses cannot, however, be fairly considered except on the basis of comparative opportunities. Schools like Emerson and Froebel may and probably do cost more to build and to run than conventional schools, but this slightly increased cost is a trifle in comparison with the increased educational opportunities provided.

It is to be regretted that in times past the advocates of the Gary system have felt that they must report the system as

having the cardinal virtue of cheapness. This is not one of its virtues and never has been. It is unfortunate, therefore, that in a footnote to the general statement made in the secretary's report Mr. Flexner should find place for a statement, evidently quoted, which may leave the impression that the type of system organized in Gary reduces per capita costs. The footnote is as follows:

An interesting application of the principle here described is contained in the plan for providing education for children resident on Federal Government reservations under the control of the Ordnance Department of the United States Army. The plan "contains all necessary features respecting rooms, equipment, and arrangement necessary for the successful double use of the regular classrooms, thus greatly increasing the normal capacity of the plant, making it possible either to meet the emergency of a sudden large increase in school population or permanently to reduce the per capita cost of the plant. This double use of classrooms is readily effected through the school program."

IN TOUCH WITH LIFE

A closer touch with life, a firmer hold upon current events at home and abroad, an intense interest in the experiences of soldiers and war workers from the home community, a multitude of war activities—all of these contacts with outside interests have come into the school life in every town and city. Where there was one such contact before the war, there are now a score. Children have felt as never before that school life, as one of them expressed it, "is the real thing." They have been made proud, and rightly, of the intimate part which their schools have had in the organization of civilian activities which have helped win the war.

Thus has the war brought the world into the school, or, if we prefer, has brought the school into the world. And having once felt that they are part of the life of the world outside school walls, that their work in the classroom and out of it can be regarded as of great value in a national emergency, neither

students nor teachers, of the present generation at least, are going to be satisfied to settle back again into smug aloofness. Books and study and recitations and libraries and laboratories have been given the breath of *life*. This new sense of the *dignity* of schooling which has come to the children must not be lost. With this in mind the skilful school executive and his staff will bend every effort to carry over into the times of peace appropriate contacts with life, as dignified and as real as were the corresponding contacts during the stress of war.

Educational Writings

I. RECENT PUBLICATIONS IN THE FIELD OF SECONDARY LATIN

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In the following lists account is taken only of the books, bulletins, and pamphlets which have been published in the field of secondary Latin within the past three years.

A. BOOKS OF GENERAL INTEREST

WEST, A. F. *The Value of the Classics*. Princeton: Princeton University Press, 1917. Pp. 396.

This volume, edited by Dean West, is a record of the addresses delivered at the Conference on Classical Studies in Education held at Princeton University, June 2, 1917, together with an interesting collection of statements and statistics from various sources. The addresses, eighteen in all, were delivered by leading American educators, statesmen, publicists, scientists, and business men. Among the more than 150 other statements testifying to the value of the classics are those of President Wilson and the late ex-President Roosevelt and ex-President Taft. The statistics published are intended to answer the two questions often asked: Is Latin dying out in the schools? and how do classical students in school and college succeed in meeting the various intellectual tests in which they are brought into competition with non-classical students? The answers given to both questions are most encouraging to those who believe in the directly practical value of the study of Latin and Greek. Dr. Abraham Flexner's grave misuse of statistics in his paper "A Modern School" is clearly shown and his conclusions refuted.

LIVINGSTONE, R. W. *A Defense of Classical Education*. New York: Macmillan, 1916. Pp. xi+278.

The author takes the position that, while the war has revealed grave shortcomings of detail in English education, on the whole there has been a vindication of its essential soundness. In his excellent chapter on "Physical

Science and the Humanities" he shows why it is impossible to base education on physical science alone because it omits a branch of knowledge which everyone needs. "It is possible," he says, "for the ordinary man to dispense with a knowledge of physical science; he can go to specialists who can do his business for him better than he can do it himself But no one can dispense with a knowledge of man. Everyone needs it and is using it each minute he is in relation with human beings whether he is speaking to them, or reading what they have written, or engaged in work which at any point touches them." The author's sanity, breadth of interest, and admirable style are added arguments for the type of education which he defends.

SHOREY, PAUL. *The Assault on Humanism*. New York: Atlantic Co., 1917. Pp. 80.

The essays contained in this little volume were originally published as articles in the *Atlantic Monthly*, June and July, 1917. In them Professor Shorey makes a counterattack on the group of educational reformers represented by Dr. Flexner and his "Modern School." Professor Shorey points out that the writings of the modernists plainly manifest violent antipathy to the classics and all that the classics represent; that "our little systems have their day," but that the human spirit that creates and dissolves all systems abides. "And the study of the human spirit is not biological evolution, or anthropology; it is neither the psychology of the laboratory nor the metaphysics of the schools; it is neither science or pseudo-science—it is humanism."

GAME, JOSIAH B. *The Teaching of High-School Latin*. Chicago: The University of Chicago Press, 1916. Pp. 123.

This handbook for teachers sets forth clearly the leading arguments for the service of Latin in education and in life, and gives many helpful suggestions as to aims and methods in teaching the subject. Of special value is the list of reference books, charts, maps, and other equipment for the teacher and the classroom.

BYRNE, LEE. *Syntax of High-School Latin*. Chicago: The University of Chicago Press, 1918. Pp. x+60.

The book is a reprint practically without change of statistical material published in 1909. The descriptive text, however, and the interpretative comment have been entirely rewritten, and there have been added several tables and diagrams. The book remains the only attempt at a scientific procedure in selecting and distributing syntax to be studied in connection with the reading of high-school Latin, and has accomplished in the field of

syntax what Lodge's *Vocabulary of High School Latin* has done in the study of vocabulary.

BROWNE, HENRY. *Our Renaissance*. New York: Longmans, Green & Co., 1917. Pp. xvi+281.

This book is a collection of essays discussing the place of classical studies in English education past and present.

SABIN, FRANCES E. *The Relation of Latin to Practical Life*. Published by the author at Madison, Wis., 1916. Pp. 124.

A revised edition of the earlier publication, a manual for teachers describing and illustrating the Latin exhibit prepared first in 1913 at the Oak Park High School, giving a concrete answer to the school-boy's question: "What's the use of Latin anyway?"

B. TEXTBOOKS

BEESON, C. H., and SCOTT, H. F. *A New Second Year Latin Book*. Chicago: Scott, Foresman & Co., 1916. Pp. 659.

Part I contains forty selections from Eutropius and *Viri Romae* dealing with Roman traditions and history; Part II contains Book i, chapters 1-29, Books ii, iii, and iv complete and selections from Books v, vi, and vii of the *Gallic War*; Part IV, four Lives from Nepos; and Part IV, three selections from Ovid. Notes and vocabulary are given at the bottom of the page. Following the text are fifteen prose lessons based on Parts I and III, and a grammatical appendix.

CLARK, C. U., and GAME, J. B. *First Latin*. Chicago: Atkinson, Mentzer & Co., 1918. Pp. vii+353.

A textbook for the first year of the grammar-translation type, with some provision for practice in oral Latin. The arrangement of material so as to provide "a lesson a day" is a special feature.

COLLAR, WILLIAM C., and DANIEL, M. G. *First Year Latin*. Boston: Ginn & Co., 1918. Pp. 347.

A revision by Mr. Thornton Jenkins of the edition of 1901. Several attractive illustrations have been added, and the vocabulary and grammatical material have been somewhat reduced.

D'OOGHE, BENJ. L., and EASTMAN, F. C. *Caesar in Gaul*. Boston: Ginn & Co., 1917. Pp. xl+676.

A fully annotated and abundantly illustrated edition of Caesar, containing selections from the *Gallic* and *Civil Wars*, a grammatical appendix,

and exercises in Latin composition. A special feature is the printing of the longer passages of indirect discourse turned into direct form.

FORSYTHE, and GUMMERE. *Junior Latin Book One*. Philadelphia: Sower & Co., 1918. Pp. 135.

A really "different" beginner's book, designed especially for seventh- and eighth-grade pupils. It covers quite completely the declensions of nouns, pronouns, and adjectives, with only enough verbs to make possible simple exercises in translating and writing Latin.

FREEMAN, W. H. *Applied Latin*. Milton, Pa.: Weidenhauer & Co., 1916. Pp. 344+xlili.

A first-year book emphasizing the value of Latin for English vocabulary and grammar. Latin vocabularies and exercises in deriving English words from them take precedence over paradigms and exercises in translation.

KELSEY, F. W. *Caesar's Commentaries*. Boston: Allyn & Bacon, 1918. Pp. xl+811.

Contains text of Books i-iv and selections from Books v-vii of the *Gallic War*, selections from the *Civil War*, and selected anecdotes for sight reading. The text is supplied with copious notes at the bottom of the page. An appendix contains the essentials of Latin grammar, historical and geographical material, and exercises in Latin composition. A feature of the book is the extensive use, both in the notes and in the illustrations, of material relating to the Great War.

LUPOLD, H. S. *Introduction to Latin*. Boston: D. C. Heath & Co., 1918. Pp. xiii+107.

A book for the grades, introducing nouns and adjectives of the first and second declensions only and verb forms in the indicative only, together with easy exercises in translating and writing Latin.

PERKINS, A. S. *Beginner's Latin Book*. Chicago: Sanborn & Co., 1918. Pp. xxii+432.

In addition to the usual material offered there is presented a fully worked-out plan for keeping a derivative notebook. The text is the result of the author's experience in developing a course in "vocational Latin" for the commercial department of the Dorchester High School in Boston.

REYNOLDS, A. B. *Latin Reader*. Boston: D. C. Heath & Co., 1918. Pp. xxiv+349.

Nature-study and easy stories for sight reading during the first year of Latin with copious footnotes occupy the first 100 pages. An appendix of

over 200 pages contains the grammatical forms and rules of syntax usually found in first books, together with exercises in Latin composition based on the reading-matter given earlier in the book. There are many novel and helpful suggestions offered to the pupil to aid him in acquiring a vocabulary and the technique of translation.

SCOTT, H. F. *First Latin Book for Junior High Schools*. Chicago: Scott, Foresman & Co., 1918. Pp. xxi+321.

While designed primarily for use in the junior high school, this book might very profitably be used in regular first-year high-school classes. It covers the material usually found in first books except that in the treatment of the verb the subjunctives are emphasized throughout the book.

BULLETINS, PAMPHLETS, REPORTS, ETC.

GENERAL EDUCATIONAL BOARD. Publications.

- a) *Occasional Papers No. 3*, "A Modern School." By ABRAHAM FLEXNER. 1917.
- b) *Occasional Papers No. 5*, "Latin and the A. B. Degree." By CHARLES W. ELIOT. 1917.
- c) *Occasional Papers No. 6*, "The Worth of Ancient Literature to the Modern World." By VISCOUNT BRICE. 1917.

UNIVERSITY OF ILLINOIS SCHOOL OF EDUCATION. Bulletins.

- a) *Bulletin No. 17*. Proceedings of the High School Conference of November 23-25, 1916. Classics Section. "Non-Essentials in First and Second Year Latin." By MARGARET HUBBARD. Pp. 98-103. "The Springfield Laboratory-Recitation Method." By ETHEL J. LUKE. Pp. 104-8. "Report on Library Equipment." By HARRIET L. BOULDIN. Pp. 113-14.
 - b) *Bulletin No. 19*. Proceedings of the High School Conference of November 22-24, 1917. Classics Section. "In the Beginning Was the Word." By T. J. McCORMACK. Pp. 114-19. "Ancient and Modern Democracy and Absolutism." By J. A. SCOTT. Pp. 119-24. "Latin Not a Dead but a Live Subject." By NITA ROBINSON. Pp. 124-25. "Contribution of the Classics to Civic and Social Welfare." By H. J. BARTON. Pp. 128-31. "Courses of Reading in the Classics." By H. V. CANTER. Pp. 131-135.
- First District Normal School, Kirksville, Mo. *Bulletin*, Vol. 16, No. 11. "Latin below the Ninth Grade." By T. JENNIE GREENE. Pp. 3-7. "Books and Illustrative Material for High School Latin." By T. JENNIE GREENE. Pp. 8-12.

- Wesleyan University. *Report of the Teachers Conference of February 23, 1916.*
"Some Aims in Language Teaching." By E. T. MERRILL. Pp. 6-14.
- Baylor University, Baylor, Texas. *Bulletin*, Vol. XIX, No. 1. "A Plea for Latin." By J. W. DOWNER. Pp. 1-41.
- State Normal School, Emporia, Kansas. A special number of *Teaching* containing "Socialized Latin" (a collection of twenty-two brief articles by prominent teachers of Latin). September 15, 1917.
- A Course of Study in Latin and Latin-English for the Junior-Senior High School.* By FLORENCE E. HALE and HARRY P. STUDY, Neodesha, Kan. Privately printed, 1918.
- A Course of Study in Latin.* By W. L. CARR and others. Printed for the School of Education, University of Chicago, 1917.
- The Sham Argument against Latin.* By CHARLES H. FORBES. Printed for the Classical Association of the Atlantic States, 1917.

II. BOOK NOTES AND REVIEWS

- NORSWORTHY, NAOMI, and WHIBLEY, MARY THEODORA. *The Psychology of Childhood.* New York: Macmillan, 1918. Pp. xix+375. \$1.60.

This book is intended to be used as a textbook, particularly in normal schools. It presupposes a general course in psychology, although some of the topics which it treats are likely to have been treated to some extent in a general course, particularly the general description of the instincts. The book is, however, written in a simple style, and from a generally practical point of view, so that it is suited to the normal-school student.

The range of topics treated is comprehensive and complete within the field of child psychology. The first chapter introduces the student to the facts of heredity as the basis for the child's original nature. In this chapter, as well as throughout the book, the authors reveal the strong influence of Professor Thorndike's thinking and adopt to a considerable extent his terminology. In discussing the general bearing of heredity the authors place relatively little emphasis on the importance of environment. One-half-page out of nineteen is devoted to this factor, and, while it is emphatically declared in a sentence or two that training has value, the student cannot but carry away the impression that the importance of heredity is overwhelming. This is unfortunate.

The next few chapters discuss the instincts. Their general characteristics are described, and then the most important human instincts are classified and described in some detail. The classification is made, not very

successfully, into non-social and social instincts and tendencies accompanied by affective states. The development with age is of course emphasized.

The intellectual phases of development are presented in four chapters with the titles "Attention," "Sense Perception," "Memory," "Imagination, Thinking and Habit Formation." This relatively large emphasis on intellectual growth is a valuable feature of the book and constitutes a marked contrast with most texts on child psychology.

The next three chapters deal in a helpful way with play, moral and religious development, and physical growth. Particularly in the last-named chapter, but also to some extent throughout the book, the discussion would be considerably improved by the introduction of graphic representation of the facts.

The most novel feature of the book is a chapter which gives a cross-section of the life of the child at five and eleven. This is distinctly helpful and might be extended somewhat farther so as to include two or three other stages.

The remaining chapters on exceptional children and methods used in child study round out this very useful text.

FRANK N. FREEMAN

SEARS, J. B. *Classroom Organization and Control*. Boston: Houghton Mifflin Co., 1918. Pp. 300.

It is refreshing experience to meet with a new volume on classroom management which begins with insistence that we must establish first our educational aims; that these aims must be definite and particularized; and that they must be used as the bases and starting-points of the various practical problems of classroom management. The author has been able in unusual measure to take the social point of view and thus to discover and utilize in his discussion specific objectives of education in a measure not possible under the older and less fruitful plan of psychological approach. There is, however, no neglect of the fundamental psychological factors.

Part II deals with the problem of getting the pupil into school and of inducing him to do the work after he has arrived. Much of the fundamental information needed by the beginning teacher concerning the incentives which are good to use and those which are to be avoided, types of discipline to be aimed at, modes of school punishment that are approved and others which are disapproved are clearly presented. It is a summary of the best thought of the specialist on these various questions.

Part III presents a fairly extensive discussion of the various problems concerned in the organization of the school: classification of the children,

grading and promotion, the division of the curriculum into units appropriate for each of the grades and classes, best types of daily programs, modes of handling the classes which are preparing their lessons as well as the methods of conducting the recitation, and, finally, the matter of measuring the results of the work. The treatment of each topic shows that the author has been in practical contact with the problems and is thus in a position to present the matters most necessary for the training of the beginning teacher.

The last portion of the volume is devoted to the personality and professional qualifications and relationships of the teachers. Large emphasis is placed upon the necessity of a proper personality on the part of the teacher; and a careful analysis of the factors that make up a proper personality is presented. Equal emphasis is placed upon the necessity of proper training by way of developing the professional aspects of the teaching personality. A highly commendable chapter deals with the matter of the teacher's health and recreational opportunities and activities. The section closes with a discussion of the relation of the teacher to the school organization and to the community in general.

For use as a textbook in teachers' training classes, the book is well supplied with teaching helps; an outline of each chapter at the beginning, a summary at the end, a set of well-chosen references for additional reading, and, finally, an extensive and varied series of questions and problems for discussion.

The book gives a general over-view of a large field of problems which need to be seen in their relationships by teachers in training and the younger teachers in service. It may well be thus introductory to a more intensive study of the numerous topics introduced as these are taken up in the more specialized advanced courses.

FRANKLIN BOBBITT

BLISS, DON C. *Methods and Standards for Local School Surveys*. Introduction by GEORGE DRAYTON STRAYER. Boston: D. C. Heath & Co., 1918. Pp. xxiv+264.

This volume is prepared as a handbook for the guidance of superintendents, principals, and teachers in the making of what has been called the self-survey. The volume must therefore be judged on the basis of its values for such purposes.

The chapter entitled "Survey Outline" is the one that will logically come first in the actual use of the volume for self-surveys. It presents a list of one hundred fourteen topics and questions upon which information is to be secured in the making of the survey. These cover practically all

of the fundamental aspects of a school organization with its varied labors. Quite a number of the topics involve extended labor and require further differentiation into specifics in the actual assemblage of the facts. This outline is reasonably well balanced, it would appear. The significance of the topics and the nature of the work to be accomplished are well indicated by being stated usually in the form of questions or problems rather than as mere topics.

The main body of the book is given over to an elaboration of these various topics. They are discussed, much as in the surveys or in books of school administration, by way of having their significance shown. Directions are given as to the kinds of facts to be secured and as to modes of organizing those facts. Where the survey will be quantitative—and the quantitative aspects are greatly emphasized in this volume—examples of statistical tables to be drawn up are presented which show not only modes of organizing facts, but also the standards of actual practice, as these have been ascertained in school surveys and in other educational studies. Drawing facts, figures, principles, standards, etc., from a number of school surveys, the volume is, in a sense, a summary of the findings of surveys. Naturally no exhaustive summary could be presented in the space of two hundred pages, and only a limited number of surveys were employed for the purpose: those by Cubberley, Ayres, Van Sickle, Strayer, Moore, F. C. Ayer, the Ohio State Survey, and the New York State Department's Survey of Buffalo, New York.

Two of the longer chapters of the volume deal with "Statistical Interpretation" and "Graphical Representation." These chapters intend to present those fundamentals of statistical and graphical methods which are actually needed by the workers in the making of the self-survey.

FRANKLIN BOBBITT

ENGELHARDT, N. L. *A School Building Program for Cities*. New York: Teachers College, Columbia University, Contributions to Education, No. 96, 1918. Pp. ix+130.

Dr. Engelhardt's dissertation includes studies in population, studies involving the school plant, and two sections on financing a building program. The measurement of population, the measurement of school population, and geographical distribution of population are the subjects included in the first series of studies. The discussion of these topics is based largely on a number of tables which give such data as: growth of population in American cities, variation in the percentage of growth in the 226 largest cities in the United States, number of cities having various percentages of total population,

number of persons to a family and to a dwelling in certain cities, the selection of cities for comparative purposes on the basis of composition of population, frequency of percentages found to exist between school population and total population, ratio between number of regular classrooms and special classrooms in 221 elementary-school buildings, and others to the number of 75. Some of the general conclusions reached by the author after emerging from this almost bewildering array of statistical tabulations are: (1) lack of any systematic building programs in many large school systems results in failure to recognize acceptable standards, to locate buildings with direct reference to future population or school needs, and to purchase adequate sites in advance; (2) the measurement of the school building plant with the aid of a score card can be done with advantage to the executive authorities; and (3) a school building program should include the measurement of population, the measurement of the school plant, and the measurement of the ability of the community to pay for extensions to the school plant.

The Gary Schools: A General Account by ABRAHAM FLEXNER and FRANK P. BACKMAN; *Industrial Work* by CHARLES R. RICHARDS; and *Organization and Administration* by GEORGE D. STRAYER and FRANK P. BACKMAN. New York: General Education Board, 1918. 25 cents, 15 cents, and 25 cents.

These volumes are three of eight to be published to set forth the results of the study of the Gary Public Schools made under the direction of the General Education Board. The *General Account* presents a view of the entire system by summarizing the separate reports in chapters on science teaching, industrial work, physical training and play, household arts, and organization and administration. Besides these summaries there appear in this volume discussions relative to the industries and the people of Gary, plan and plant, course of study, classroom instruction and tests, auditorium and religious instruction, enrolment, attendance, and pupil progress and costs.

In his survey of the industrial work Mr. Richards devotes a chapter each to shopwork in the schools as a whole, shops and tests in the Emerson School, shops and tests in the Froebel School, shopwork in the Jefferson School, drawing and handwork, forms and records. A concluding chapter is devoted to a summary and conclusions. There is also an appendix containing tables giving in detail the products of the several school shops and practical tests in machine-shop, forge, foundry, printing, woodworking, sheet metal, and plumbing.

The authors of the volume on organization and administration discuss such topics as comparative cost, supervision and administration, use of plant, organization, plant, program, and present-day problems. There is also an appendix made up of the following seven tables: Emerson School Program, Froebel School Program, Beveridge School Program, Special Work of All Froebel Classes, Division of Day at Froebel School, Program of School No. 12 Passiac, and Proposed Froebel School Program. On a whole, the material in each of the volumes will find a welcome in the field of school administration. A survey of a school system which has the reputation that the Gary schools have cannot fail to interest all those engaged in educational administration.

HOBSON, ESIE GARLAND. *Educational Legislation and Administration in the State of New York from 1777 to 1850*. Chicago: The University of Chicago, 1918. Pp. 267.

This is the first of a series of monographs on educational legislation now in preparation by former or present graduate students in the Department of Education of the University of Chicago. The following statement by Professor Jernegan in the introduction to the volume presents the purposes contemplated in the monographs: "These monographs are intended to supply, in part, the gap in our knowledge of the educational legislation of various states. Owing to the large amount of such legislation, especially with respect to private institutions, it is not practicable to print, in this series, the text of all the educational acts passed. However, in order to provide the student of our educational history with the information which he must have in order to find easily the text of every educational act passed, there will be printed, in an appendix, as complete a list as possible of the titles of such acts, with exact references to the sources where each may be found. It is intended that every act, or portion of an act, bearing directly on education, shall be recorded. This will include not only public acts, but those of a private character, relating to every type of institution in which instruction was given as well as to literary, scientific, or miscellaneous societies whose purposes was the discovery or spread of knowledge. It is the purpose of these studies to analyze this legislation and make it intelligible, in chapters which will set forth the general factors that account for the legislation, its characteristic features, the relation of the state to administration, support, teachers, curriculum, and other features of the public systems established, including elementary, secondary, and higher institutions. Other chapters, varying with individual states, will deal with special types of legislation involving such subjects as the development of city

systems, the management of land grants for education, the relation of the state to special classes of public educational institutions, such as those for defective classes, and to private institutions as shown in the charters granted or acts establishing."

In her monograph Miss Hobson has worked out in one state what the series contemplates for a number of states. Her discussion centers around such topics as formative influences, dual system of school control, education under regents, the common school system, special legislation for cities, support of education, and education of special classes. The appendix contains a chronological list of academies incorporated with references to acts relative to them, list of acts granting means of support to academies, list of societies for general educational purposes, and a chronological list of titles and dates of laws relative to education, 1777-1850. On a whole, the monograph is a valuable contribution to the history of education in the United States, a field in which comparatively little has been done.

WOODBURN, JAMES A., and MORAN, THOMAS F. *The Citizen and the Republic*. New York: Longmans, Green, and Co., 1918. Pp. xlv+398.

This book aims to present high-school civics in the light of recent events. It takes for granted that readjustments of the present course in high-school civics will have to be made in order to fit the new order of things. As the authors view the situation, the phases of civics to be most emphasized in these contemplated readjustments are: such present-day problems as military service, child labor, the commission form of government, the aspects of government in our international relations, the foundation of our democracy, the sources of our liberties, the means by which our liberties are preserved, and the democracy of service. At the end of each chapter are topics, queries and references all of which have been prepared with much care. The book also contains many timely illustrations, maps, and charts. Anyone desiring a text which meets the demands of the "new civics" and at the same time holds fast to that which is good in the old will be interested in examining Professors Woodburn and Moran's book.

BISHOP, A. L., and KELLER, A. G. *Industry and Trade—Historical and Descriptive Account of Their Development in the United States*. Boston: Ginn & Co., 1918. Pp. vi+426.

The presentation of a simple but adequate account of the development and present status of the industrial and commercial life of the United States is the aim of this book. On reading the discussion of representative industries in the several chapters one gets an excellent perspective of our workaday

life as a living and developing whole. There are seven parts to the book, one devoted to each of the following: basic factors in our industry, land and people, agricultural industries, mineral industries, manufacturing industries, transportation, animal industries, the promotion of American industries. Questions for review on each chapter appear at the end of the volume. Many well-selected illustrations and maps are also to be found in it. As a text in courses in economic and industrial geography the book will no doubt achieve success.

III. CURRENT PUBLICATIONS RECEIVED DURING THE PAST MONTH

A. GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

- FLEXNER, ABRAHAM, and BACHMAN, FRANK P. *The Gary Schools: A General Account*. New York: General Education Board. Paper, 1918. Pp. vi+265.
- GOLLOMB, JOSEPH. *That Year at Lincoln High*. New York: Macmillan, 1918. Pp. 290. \$1.35.
- MATHEWS, SHAILER. *The Spiritual Interpretation of History*. Cambridge: Harvard University Press, 1917. Pp. xiv+219.
- RICHARDS, CHARLES R. *The Gary Public Schools: Industrial Work*. New York: General Education Board, 1918. Paper. Pp. xix+204.
- STRAYER, GEORGE D., and BACHMAN, FRANK P. *The Gary Public Schools: Organization and Administration*. New York: General Education Board, 1918. Paper. Pp. xix+126.
- STUART, HENRY WALDGRAVE. *Liberal and Vocational Studies in the College*. Berkeley, Cal.: Stanford University, 1918. Paper. Pp. 72.
- TEGGART, FREDERICK J. *The Processes of History*. New Haven: Yale University Press, 1918. Pp. ix+162. \$1.25.

B. BOOKS PRIMARILY FOR ELEMENTARY-GRADE TEACHERS AND PUPILS

- BURNHAM, SMITH. *Our Beginnings in Europe and America*. Philadelphia: John C. Winston Co., 1918. Pp. xvi+375.
- DOWNING, ELLIOT R. *A Field and Laboratory Guide in Biological Nature-Study*. Chicago: The University of Chicago Press, 1918. Paper. Pp. 120.

- LIPPITT, LOUISA C. *Personal Hygiene and Home Nursing*. Yonkers-on-Hudson: World Book Co., 1919. Pp. vii+256. \$1.28.
- TAPPAN, EVA MARCH. *The Little Book of the War*. Boston: Houghton Mifflin Co., 1918. Pp. v+138.
- MULETS, LENORE E. *Sunshine Lands of Europe*. Yonkers-on-Hudson: World Book Co., 1918. Pp. 159. \$0.64.
- War Time Drawing*. New York: Institute For Public Service, 1918. Paper. Pp. 64. \$0.75.

C. BOOKS PRIMARILY FOR HIGH-SCHOOL
TEACHERS AND PUPILS

- ALLEN, CLIFFORD G. *Fabulas y Cuentos*. Yonkers-on-Hudson: World Book Co., 1918. Pp. viii+180. \$0.88.
- ASHLEY, ROSCOE LEWIS. *The War and America*. War Citizenship Lessons. New York: Macmillan, 1918. Pp. viii+103. \$0.60.
- . *Modern European Civilization*. New York: Macmillan, 1918. Pp. xxii+710. \$1.80.
- BALDENSBERGER, FERNAND (Editor). *Les Traits éternels de la France*. New Haven: Yale University Press, 1918. Pp. 90. \$1.00.
- BISHOP, AVARD LONGLEY, and KELLER, ALBERT GALLOWAY. *Industry and Trade*. Boston: Ginn & Co., 1918. Pp. vi+426.
- BOWLIN, WILLIAM R., and MARSH, GEORGE L. *Vocational English*. Chicago: Scott, Foresman & Co., 1918. Pp. 396.
- FLINT, L. N. *Newspaper Writing in High Schools*. New York: L. A. Noble, 1917. Paper. Pp. 72. \$0.75.
- GOLDBERGER, HENRY H. *English for Coming Citizens*. New York: Scribner, 1918. Pp. xx+236.
- REYNOLDS, A. B. *Latin Reader*. Boston: D. C. Heath & Co., 1918. Pp. xxiv+349.
- WOODBURN, JAMES ALBERT, and MORAN, THOMAS FRANCIS. *The Citizen and the Republic*. New York: Longmans, Green & Co., 1918. Pp. viii+398.

D. PUBLICATIONS OF THE UNITED STATES BUREAU OF
EDUCATION AND SIMILAR MATERIAL
IN PAMPHLET FORM

- Army Mental Tests. Methods, Typical Results and Practical Applications*. Washington, D. C. Pp. 23.
- Palmer Collection of Eighteenth-Century American Furniture*. New York: Metropolitan Museum of Art, 1918. Bulletin No. 12, December, 1918.

- Rural-Teacher Curricula.* Bottineau, North Dakota: Forestry State Normal School Quarterly Bulletin No. 4, December, 1918.
- Recent Issue of the Federal Board for Vocational Education. Washington, D. C.: Government Printing Office.
- Buildings and Equipment for Schools and Classes in Trade and Industrial Subjects.*
- Agricultural Education.*
- Vocational Education for Foreign Trade and Shipping.*
- What the Employers of America Can Do for the Disabled Soldiers and Sailors.*
- The Nation's Workers.*
- To the Soldier Returning to Civil Life.*
- To the Household of the Disabled Soldier and Sailor.*
- To the Disabled Soldier and Sailor in the Hospital.*

E. MISCELLANEOUS BOOKS AND PAMPHLETS

- BAKER, JAMES H. *After the War—What?* Boston: Stratford Co., 1918. Pp. ix+177.
- BECKER, CARL L. *America's War Aims and Peace Program.* Washington, D. C.: Committee on Public Information, 1918. Paper. Pp. 52.
- CLARK, ZELMA E. *As a Girl Thinketh.* Chicago: Colonial Press, 1918. Paper. Pp. 42.
- DELANO, JANE A. *Home Hygiene and Care of the Sick.* Philadelphia: P. Blakiston's Son & Co., 1918. Paper. Pp. xv+333.
- GEISER, KARL FREDERICK. *Democracy versus Autocracy.* Boston: D. C. Heath & Co., 1918. Pp. viii+94.
- LYNCH, COLONEL CHARLES. *First Aid, General Edition.* Philadelphia: P. Blakiston's Son & Co., 1918. Paper. Pp. xiv+209.
- . *First Aid, Woman's Edition.* Philadelphia: P. Blakiston's & Co., 1918. Paper. Pp. x+194.
- MENGE, EDWARD J. *Backgrounds for Social Workers.* Boston: Richard G. Badger, 1918. Pp. 214.
- MONROE, PAUL, and MILLER, IRVING E. *The American Spirit.* Yonkers-on-Hudson: World Book Co., 1918. Pp. xv+336.
- WESTON, FRANK. *The Black Slaves of Prussia.* Boston: Houghton Mifflin Co., 1918. Paper. Pp. 23.
- WILSON, GEORGE GRAFTON. *A League of Nations.* Boston: World Peace Foundation, June, 1918. Paper. Pp. 53.

